

# EXHIBIT B

IN THE UNITED STATES DISTRICT COURT  
FOR THE SOUTHERN DISTRICT OF NEW YORK

Dena C. Sharp (State Bar No. 245869)  
Jordan Elias (State Bar No. 228731)  
Adam E. Polk (State Bar No. 273000)  
Scott M. Grzeneczyk (State Bar No. 279309)  
**GIRARD SHARP LLP**  
601 California Street, Suite 1400  
San Francisco, CA 94108  
Tel: (415) 981-4800  
Fax: (415) 981-4846  
[dsharp@girardsharp.com](mailto:dsharp@girardsharp.com)  
[jelias@girardsharp.com](mailto:jelias@girardsharp.com)  
[apolk@girardsharp.com](mailto:apolk@girardsharp.com)  
[scottg@girardsharp.com](mailto:scottg@girardsharp.com)

Tina Wolfson (State Bar No. 174806)  
Theodore W. Maya (State Bar No. 223242)  
Rachel Johnson (State Bar No. 331351)  
**AHDOOT & WOLFSON, PC**  
2600 West Olive Avenue, Suite 500  
Burbank, CA 91505  
Tel: (310) 474-9111  
Fax: (310) 474-8585  
[twolfson@ahdootwolfson.com](mailto:twolfson@ahdootwolfson.com)  
[tmaya@ahdootwolfson.com](mailto:tmaya@ahdootwolfson.com)  
[rjohnson@ahdootwolfson.com](mailto:rjohnson@ahdootwolfson.com)

*Attorneys for Plaintiffs*

[Additional Counsel Listed on Signature  
Page]

In re Google Advertising Antitrust Litigation

Civil Action No. 21-MD-3010 (PKC)

**UNITED STATES DISTRICT COURT**

Style Definition	...	[59]
Style Definition	...	[58]
Style Definition	...	[57]
Style Definition	...	[56]
Style Definition	...	[55]
Style Definition	...	[54]
Style Definition	...	[53]
Style Definition	...	[52]
Style Definition	...	[51]
Style Definition	...	[50]
Style Definition	...	[49]
Style Definition	...	[48]
Style Definition	...	[47]
Style Definition	...	[46]
Style Definition	...	[45]
Style Definition	...	[44]
Style Definition	...	[43]
Style Definition	...	[42]
Style Definition	...	[41]
Style Definition	...	[40]
Style Definition	...	[39]
Style Definition	...	[38]
Style Definition	...	[37]
Style Definition	...	[36]
Style Definition	...	[35]
Style Definition	...	[34]
Style Definition	...	[33]
Style Definition	...	[32]
Style Definition	...	[31]
Style Definition	...	[30]
Style Definition	...	[29]
Style Definition	...	[28]
Style Definition	...	[27]
Style Definition	...	[26]
Style Definition	...	[25]
Style Definition	...	[24]
Style Definition	...	[23]
Style Definition	...	[22]
Style Definition	...	[21]
Style Definition	...	[20]
Style Definition	...	[19]
Style Definition	...	[18]
Style Definition	...	[17]
Style Definition	...	[16]
Style Definition	...	[15]
Style Definition	...	[14]
Style Definition	...	[13]
Style Definition	...	[12]
Style Definition	...	[11]
Style Definition	...	[10]
Style Definition	...	[9]
Style Definition	...	[8]
Style Definition	...	[7]

**NORTHERN DISTRICT**

**[PROPOSED] CONSOLIDATED ADVERTISER CLASS ACTION COMPLAINT**

**TABLE OF CALIFORNIA CONTENTS**

**SAN JOSE DIVISION**

**IN RE GOOGLE DIGITAL ADVERTISING  
ANTITRUST LITIGATION**

**Case No. 5:20-cv-03556-BLF**

**FIRST AMENDED CONSOLIDATED  
CLASS ACTION COMPLAINT**

**DEMAND FOR JURY TRIAL**

**Hon. Beth Labson Freeman**

**FIRST AMENDED CONSOLIDATED CLASS ACTION COMPLAINT  
CASE NO. 5:20-cv-03556-BLF**

Formatted: Space After: 8 pt, Widow/Orphan control

I.	NATURE OF THE ACTION .....	1
II.	JURISDICTION AND VENUE .....	6
III.	PARTIES .....	7
A.	Plaintiffs.....	7
1.	Hanson Law Office.....	7
2.	Vitor Lindo.....	9
3.	Cliffy Care Landscaping, Inc. ....	9
4.	Kinnin, Inc. ....	10
5.	Raintree Medical and Chiropractic Center, LLC.....	10
6.	Rodrock Chiropractic PA.....	10
B.	Defendants .....	10
IV.	OVERVIEW OF DIGITAL ADVERTISING AND THE AD TECH STACK .....	11
V.	RELEVANT MARKETS .....	22
A.	Exchanges .....	23
1.	Exchanges in the United States Constitute a Relevant Antitrust Market.....	23
2.	Google Has Monopoly Power in the Exchange Market.....	28
B.	Ad-Buying Tools .....	33
1.	Buying Tools for Small Advertisers in the United States Constitute a Relevant Antitrust Market.....	34
2.	Google Has Monopoly Power in the Buying Tools Market for Small Advertisers.....	42
3.	Buying Tools for Large Advertisers in the United States Constitute a Relevant Antitrust Market.....	45
4.	Google Has Market Power in the Market for Buying Tools for Large Advertisers in the United States.....	50
C.	The Relevant Product Markets Exclude Advertising on Closed-Ended or “Walled Garden” Websites.....	51

1	D. The Relevant Product Markets Exclude Direct Placements. ....	5243
2	E. The Relevant Product Markets Exclude Non-Digital Advertising. ....	5445
3	F. Programmatic Display Advertising and Search Advertising Are Economically Distinct Products.....	56
4	VI. GOOGLE’S ANTICOMPETITIVE AND DECEPTIVE CONDUCT.....	57
5	A. Google’s Acquisitions, Dominance in Search, and Control of User Data Created the Conditions for Its Monopolization and Led Most Advertisers to Use Only Its Display Advertising Services. ....	57
6	B. Google’s Scheme to Monopolize Injured Advertisers Through Various Auction-Rigging Devices and Anticompetitive Restrictions.....	73
7	1. Dynamic Allocation Harmed Competition in the Ad Exchange Market and Injured Advertisers. ....	73
8	2. Enhanced Dynamic Allocation Harmed Competition in the Ad Exchange Market and Injured Advertisers. ....	76
9	3. Project Bernanke Harmed Competition in the Market for Small Advertisers and Injured Advertisers. ....	77
10	4. Dynamic Revenue Share (DRS) Harmed Competition in the Ad Exchange Market and Injured Advertisers. ....	81
11	5. Google’s Reserve Price Optimization Deceived and Injured Advertisers in the Ad Exchange Market.....	85
12	6. Google’s Unified Pricing Rules Harmed Competition in the Ad Exchange Market and the Markets for Ad-Buying Tools for Small and Large Advertisers, and Injured Advertisers.....	89
13	7. Project Poirot and Project Elmo Harmed Competition in the Ad Exchange Market and the Market for Ad-Buying Tools for Large Advertisers, and Injured Advertisers. ....	93
14	8. Google’s Imposition of Line-Item Caps and Redaction of Auction Data Harmed Competition in the Exchange Market and Injured Advertisers. ....	95
15	C. Google’s Network Bidding Agreement with Meta and Its Imposition on Publishers of Uniform Pricing Rules and Line-Item Caps Unreasonably Restrain Trade.....	98

1.	<u>The Network Bidding Agreement Places All Other Bidders</u>	
	<u>Transacting Bids Through Google’s Open Bidding and Final In-</u>	
	<u>App Auctions at a Competitive Disadvantage. ....</u>	<u>99</u>
2.	<u>Google Combined with Publishers to Reduce Competition with</u>	
	<u>Unified Pricing Rules and Line-Item Caps. ....</u>	<u>101</u>
VII.	<u>INTERSTATE TRADE AND COMMERCE .....</u>	<u>102</u>
VIII.	<u>ANTITRUST IMPACT .....</u>	<u>103</u>
IX.	<u>TOLLING OF THE STATUTE OF LIMITATIONS.....</u>	<u>136</u>
A.	<u>Google’s Conduct Constitutes Continuing Violations of the Antitrust</u>	
	<u>Laws and Tolls the Statute of Limitations. ....</u>	<u>136</u>
B.	<u>The Statutes of Limitations Did Not Begin to Run Because Plaintiffs Did</u>	
	<u>Not and Could Not Discover Their Claims.....</u>	<u>137</u>
C.	<u>Google’s Fraudulent Concealment Told the Statute of Limitations .....</u>	<u>138</u>
X.	<u>CLASS ACTION ALLEGATIONS .....</u>	<u>142</u>
XI.	<u>CAUSES OF ACTION.....</u>	<u>145</u>
XII.	<u>PRAYER FOR RELIEF .....</u>	<u>156</u>
XIII.	<u>DEMAND FOR JURY TRIAL .....</u>	<u>157</u>

Plaintiffs, on behalf of themselves and all others similarly situated, bring this ~~first~~  
~~amended~~ consolidated advertiser class action complaint for equitable relief and treble damages  
 under the Sherman Antitrust Act, 15 U.S.C. §§ 1 and 2, and the Unfair Competition Law, Cal.  
 Bus. & Prof. Code § 17200 *et seq.*

## I. NATURE OF THE ACTION

1. ~~Over the past several years, A generation after Google leveraged its monopoly in~~  
~~online became the dominant internet search and search advertising to acquire an illegal~~  
~~monopoly in brokering display advertising engine, it now dominates the placement of~~  
~~advertisements on other companies' websites. Google gained this market dominance in part by~~  
~~acquiring rivals in the online advertising space, conditioning access to its search results data and~~  
~~YouTube video advertising platform upon the purchase of its separate display advertising~~  
~~services, and making its intermediation systems incompatible with those of its competitors.~~  
 Google's scheme to monopolize the market for brokering display advertising has vastly reduced  
 competition in the purchase and placement of this advertising and resulted in economic harm to  
 advertisers and publishers alike.

2. ~~Forty-nine state attorneys general are currently conducting antitrust~~  
~~investigations of Google's conduct in for placing digital advertising display ads across the web~~  
~~and on mobile device applications. The ads people see on the web and in apps are almost~~  
~~invariably placed through Google. The markets, and the United States Department of Justice~~  
~~and eleven state attorneys general recently filed a civil antitrust action against Google for~~  
~~unlawfully maintaining monopolies in the markets for online search these display ads are~~  
~~complex and search advertising.~~

3. ~~1. Because of its pervasive monopoly conduct, rely on instantaneous auctions~~  
~~through which publishers and advertisers trade display inventory through brokers on electronic~~  
~~exchanges. Google now controls the "ad tech stack" comprising themade up of these~~  
 intermediary services between advertisers, ~~which who~~ pay to place ~~digital these~~ advertisements,

Formatted: Right: 0", Widow/Orphan control, Tab stops: Not at 3.5"

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



and publishers paid to publish ~~these~~the ads on their websites. ~~Companies that wish to place or~~  
~~publish online advertisements have little choice but to pay Google for its advertising~~  
~~services~~Google monopolized the means to buy and sell display-ad placements, including  
~~instantaneous auctions, and Google's exclusion of competition in this intermediation market has~~  
~~enabled it to favor its own advertising platforms. Google's extraction of monopoly rents through~~  
~~fees charged to both advertisers and through secret rigging of ad auctions and anticompetitive~~  
~~agreements imposed on publishers has resulted in higher prices paid by advertisers, higher~~  
~~consumer prices, and lower payments to publishers of online display advertisements.~~

2. Nearly every online advertiser now relies on Google to broker placements of  
banner, sidebar, pop-up, in-app, and video ads to market their goods and services to consumers.  
Likewise, nearly all of today's online publishers (be they large or small) and mobile application  
developers depend on one company—Google—as their intermediary to sell their display-ad  
space in ad exchanges, the centralized electronic trading venues where display ads are bought  
and sold. In addition to serving both the buyers and the sellers of digital display ads, Google also  
operates the largest exchange, AdX, which processes about 11 billion ad spaces every day. A  
senior Google employee noted that "[t]he analogy would be if Goldman or Citibank owned the  
NYSE"—and also held monopoly power in the markets in which buyers place bids, sellers offer  
certain prices, and the auctions themselves occur. If this were a live, in-person auction, Google  
would be the auctioneer as well as a bidder; and it would have designed the process so that the  
other bidders could not hear the live bids, but instead would need to submit advance bids based  
on guesses about what the other bids were going to be. Exacerbating these conflicts, Google is  
also a seller of a portion of the inventory up for bid.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

3. ~~Like the other class members, Plaintiffs dealt directly with Google in its capacity as display advertising broker, having placed online~~ When a user visits a commercial web page, he or she typically sees display ads. Every time this happens, a unique “impression” has been generated for each ad space available. In the fraction of a second it takes for the page to load, the impression is bought, sold, and filled with an advertisement to display to the user. Ad impressions that display inside a user’s mobile phone applications (in-app ads) work much the same way.

4. Ad impressions are functionally distinct from traditional ads. An ad impression is not just space on a page; it is an opportunity to sell an advertisement “targeted” to a specific user or type of user. Unlike an ad in traditional print media, a single slot for a display ad can be sold to many different advertisers in millions of separate transactions at different prices.

5. Publishers use a unique type of product called an “ad server.” When an impression becomes available, the ad server collects and conveys information about the impression (e.g., dimensions, placement, user information), and then automates split-second decisions about which ad to display. Advertisers generate substantial demand for purchasing display-ad inventory. Advertisers use specialized ad-buying tools to optimize and carry out their purchases of ad impressions. These tools let advertisers set various decision-engine parameters to optimize their unique ad campaigns and automated purchasing decisions (such as details about the types of users to target, the bids to submit for various types of ad inventory, etc.). Using these parameters, the ad-buying tool will then automatically place bids to purchase impressions on the advertiser’s behalf. Advertisers use two distinct types of buying tools: large advertisers use complex and customizable tools to buy large volumes of ad space, and small advertisers use basic buying tools to make smaller purchases of ad space. Publishers using ad servers and

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

advertisers using ad-buying tools connect with each other in the ad exchange—a real-time auction marketplace—billions of times every day.

6. Google exercises substantial power in several display advertising markets. As relevant to this Complaint, Google holds monopoly power in the market for ad exchanges (dominated by its AdX exchange) and in the market for ad-buying tools for small advertisers (dominated by Google Ads, formerly known as AdWords), and has market power in the market for ad-buying tools for large advertisers (dominated by DV360). In each of these markets Google abused its power to suppress competition, causing advertisers to pay higher prices to place display ads, as set forth in greater detail below.

7. By way of summary, Google’s display advertising monopolies originated with its 2008 acquisition of DoubleClick, which operated the leading ad server, DoubleClick for Publishers (DFP). Google effectively turned DFP—previously a competitive clearinghouse of ad-impression inventory—into a chokepoint through which it could exclusively control access to the demand produced by hundreds of thousands of advertisers. Google then used DFP to foreclose competition from rival exchanges and buying tools. Google implemented a program called Dynamic Allocation, which gave AdX a right of first refusal on auction transactions. Google then refined that program, devising “Enhanced Dynamic Allocation,” which gave Google access to a new pool of premium ad inventory and walled off rival buyers from that pool.

8. Just a few years ago, online publishers in the United States were selling large volumes of placements directly to advertisers and through multiple exchanges. Direct deals and transactions on competitive exchanges cost less to process than Google charged for trades on its exchange. Reacting to these competitive threats, Google coerced publishers to give it advance looks at the ad space they offer through other exchanges. Google then intercepts the most

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 valuable opportunities, trades them itself at higher rates, and passes less valuable space to  
2 advertisers bidding elsewhere. Google also limits the number of other exchanges that can  
3 receive publishers' bid requests, limits publishers' ability to set different prices on different  
4 exchanges, and interferes with the performance of those exchanges—practices that allow it to  
5 sell more impressions at supra-competitive premiums. Further, Google imposes a 5 to 10 percent  
6 fee for transactions that clear on *other* exchanges, simultaneously profiting on trades outside  
7 Google's system and handicapping companies that clear those trades.

8 9. Google also entered into a "Network Bidding Agreement" (NBA) with Meta that  
9 impaired competitive bidding and transactions on Google's "Final Clearinghouse Auctions" for  
10 web display and in-app advertisements by giving Meta special advantages and proprietary  
11 information no other bidder enjoyed. Google distorted competition in these auctions, placing all  
12 non-Meta bidders at a competitive disadvantage by giving Meta information on bidder identities  
13 to improve Meta's "match rates," information that enabled Facebook to better determine whether  
14 ads would be seen by humans instead of bots, and a timeout period during which Meta can  
15 evaluate bid requests and place a bid that is almost twice as long as the period for all other  
16 bidders.

17 10. Moreover, Google secretly manipulated auctions, coerced publishers and  
18 advertisers to transact in AdX and coerced advertisers to exclusively use Google's buying tools.  
19 Google manipulates auctions with its secret "Bernanke" programs and technology to increase its  
20 take rate and then uses the resulting pool of ill-gotten gains to manipulate subsequent auctions,  
21 stifling competition in the exchange market and in the small-advertiser buying tools market.  
22 Google's "Dynamic Revenue Share" program rigged auctions such that AdX would win  
23 impressions it otherwise would have lost to rivals, thereby enabling Google to avoid price

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

competition without forfeiting market share. Google imposes “Unified Pricing Rules” on publishers through coercive agreements that prevent them from setting lower threshold bids on competing exchanges or giving different advertisers lower prices than publishers give Google and ad buyers on its properties. And Google’s “Reserve Price Optimization” program secretly overrode publishers’ exchange floor prices, increasing the amount advertisers paid for impressions on AdX.

4.11. Plaintiffs in this action placed online and in-app display and search advertisements using Google’s services. ~~Plaintiffs, like the other class members, suffered economic losses as a result of Google’s monopolization and. They paid anticompetitive overcharges due to Google’s antitrust violations and, on behalf of a class of similarly situated advertisers, seek all appropriate equitable relief and damages through this action.~~

## II. JURISDICTION AND VENUE

5.12. This Court has original jurisdiction over Plaintiffs’ federal antitrust ~~claim~~ claims under the Clayton Act, 15 U.S.C. § 15. The Court also has diversity jurisdiction over this action under the Class Action Fairness Act of 2005, 28 U.S.C. § 1332(d), because at least one class member is of diverse citizenship from Defendants, there are more than 100 class members nationally, and the aggregate amount in controversy exceeds \$5,000,000.

6. Venue is ~~proper~~ properly laid in this ~~District~~ forum under 28 U.S.C. § ~~1391~~. Google’s principal place of business is in this District, and it regularly conducts business here. A substantial part of ~~1407~~ based on the events giving rise to Plaintiffs’ causes of action occurred in or emanated from this District.

7.13. Assignment to the San Jose Division is appropriate under Local Rule 3-2(e) because a substantial part of the conduct ~~Judicial Panel on Multidistrict Litigation’s decision of~~

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56", Don't keep with next

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

August 10, 2021, reported at issue in this case occurred in Santa Clara County, 555 F. Supp. 3d 1372.

### III. PARTIES

#### A. Plaintiffs

##### 1. Hanson Law Office

1. Plaintiff, Christopher Hanson d/b/a Hanson Law Office, successor-in-interest to Hanson Law Firm, PC

8-14. Plaintiff Hanson Law Firm, PC, is a law firm based in San Francisco, Napa, California. In connection with its dissolution, Hanson Law Firm assigned its causes of action in this litigation to Christopher Hanson. During the class period, Hanson Law FirmOffice paid Google directly to broker the placement of its display advertisements on third-party websites.

9-15. Hanson Law FirmOffice paid Google \$487.78 between June 2016 and September 6, 2016, for these intermediation services.

10-16. From June 1, 2016 to September 6, 2016, Hanson Law Firm'sOffice's display advertising for its legal services appeared on 992 different websites a total of 689,876 different times. These websites ranged from news organizations that included the *Los Angeles Times*, *Daily Beat*, and *Vanity Fair*, to dating websites such as Match.com, as well as information sites like Wikihow.com.

11-17. During the class period, Hanson Law FirmOffice also paid Google for AdWords advertising connected to various searches performed using Google's internet search engine.

12-18. Hanson Law FirmOffice placed display ads as well as search ads to expand the reach of its online advertising to include potential clients who may not have specifically searched

Formatted: Font: Not Bold

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

the web for relevant topics or legal services, and to optimize its re-marketing to users who had already visited its website or clicked on its ad and to those who carried a similar “cookie” profile.

~~13. — Hanson Law Firm sustained antitrust injury by paying supra-competitive prices to Google to broker the placement of its display advertisements on third-party websites. These anticompetitive overcharges directly and proximately resulted from Google’s monopolization of the relevant market, defined in Part VI below.~~

**2. — Surefreight Global LLC d/b/a Prana Pets**

~~14. — Plaintiff Surefreight Global LLC d/b/a Prana Pets is an herbal remedy company based in Delray Beach, Florida and incorporated under Florida law. During the class period, Prana Pets paid Google directly to broker the placement of its display advertisements on third-party websites, including sites geared to dog owners.~~

~~15. — Prana Pets paid Google \$972.80 between August 2016 and July 2018, and \$2,040.00 between February 2019 and December 2020, for these intermediation services.~~

~~16. — During the class period, Prana Pets also paid Google for AdWords advertising connected to various searches performed using Google’s internet search engine.~~

~~17. — Prana Pets placed display ads as well as search ads to expand the reach of its online advertising to include consumers who may not have specifically searched the web for relevant products, and to optimize its re-marketing to users who had already visited its website or clicked on its ad and to those who carried a similar “cookie” profile. Prana Pets’ display ads included branding and product specific banner ads.~~

~~18.19. Prana Pets~~Hanson Law Office sustained antitrust injury by paying supra-competitive prices to Google to broker the placement of its display advertisements on third-party websites. These anticompetitive overcharges directly and proximately resulted from Google’s monopolization of the relevant ~~market~~markets and anticompetitive conduct as set forth herein.

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

**3.2. Vitor Lindo**

Formatted: Font: Not Bold

19-20. Plaintiff, Vitor Lindo, is a citizen and resident of Georgia and a photographer based in Pembroke, Georgia. During the class period, Mr. Lindo paid Google directly to broker the placement of ~~its~~<sup>his</sup> display advertisements on third-party websites, including sites associated with wedding services.

20-21. Mr. Lindo paid Google \$21,971.45 between 2016 and 2019 for these intermediation services.

21-22. During the class period, Mr. Lindo also paid Google for AdWords advertising connected to various searches performed using Google's internet search engine.

22-23. Mr. Lindo placed display ads as well as search ads to expand the reach of his online advertising to include consumers who may not have specifically searched the web for topics or services relating to wedding photography, and to optimize re-marketing to users who had already visited his website or clicked on its ad and to those who carried a similar "cookie" profile.

23-24. Mr. Lindo sustained antitrust injury by paying supra-competitive prices to Google to broker the placement of its display advertisements on third-party websites. -These anticompetitive overcharges directly and proximately resulted from Google's monopolization of the relevant ~~market~~<sup>markets and anticompetitive conduct</sup>.

**3. Cliffy Care Landscaping, Inc.**

25. Plaintiff, Cliffy Care Landscaping LLC, is a limited liability company in good standing, registered in the state of Kansas, with a principal place of business at 15837 S. Mahaffie Street, Olathe, Kansas, 66062.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



26. Cliffy Care Landscaping LLC purchased display and in-app advertising through Google Ads between September 2018 and the present.

**4. Kinnin, Inc.**

27. Plaintiff, Kinin, Inc., is a corporation in good standing, organized under the laws of Delaware and registered in California, with a principal place of business at 1104 Camino Del Mar #101, Del Mar, California, 92104.

28. Kinin, Inc. purchased display and in-app advertising through Google Ads between September 2018 and the present.

**5. Raintree Medical and Chiropractic Center, LLC**

29. Plaintiff, Raintree Medical and Chiropractic Center LLC, is a limited liability company in good standing, registered in Missouri, with a principal place of business at 931 SW Lemans Lane, Lee's Summit, Missouri, 64082.

30. Raintree Medical and Chiropractic Center LLC purchased display and in-app advertising through Google Ads between September 2018 and the present.

**6. Rodrock Chiropractic PA**

31. Plaintiff, Rodrock Chiropractic PA, is a professional association company in good standing, registered in the state of Kansas, with a principal place of business at 412 Ames Street, Baldwin City, Kansas, 66006.

32. Rodrock Chiropractic PA purchased display and in-app advertising through Google Ads between September 2018 and the present.

**B. Defendants**

24-33. Defendant, Google LLC, is a limited liability company organized under the laws of Delaware with its principal place of business in Mountain View, California. ~~Google LLC is a~~

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

~~technology company that provides internet-related services and products, including online advertising technologies and a search engine.~~

~~25.34.~~ Defendant, Alphabet Inc., is a corporation organized under the laws of Delaware with its principal place of business in Mountain View, California. Google LLC is a wholly-owned ~~and controlled subsidiary of XXVI Holdings Inc., which is a~~ subsidiary of Alphabet Inc.

~~26.35.~~ Google LLC and Alphabet Inc. are collectively referred to herein as “Google.”

#### ~~IV. FACTUAL ALLEGATIONS~~

##### ~~A. Overview of Digital Advertising~~

~~36.~~ Defendant Meta Platforms, Inc., d/b/a as Meta and formerly known as Facebook, Inc., is a Delaware corporation with its principal place of business in Menlo Park, California.

#### ~~IV. OVERVIEW OF DIGITAL ADVERTISING AND THE AD TECH STACK~~

~~27.37.~~ Businesses have long relied on advertising to promote their products, generate brand awareness, and increase sales. Before the internet age, advertising campaigns were planned and managed by media buyers. If a media buyer needed to help a toy manufacturer reach parents of children, ~~he or~~ she might place an ad in *Parents Magazine*, or in the family section of the local newspaper.

~~28.~~ Digital advertising today works differently. The internet allows businesses to target potential customers with greater precision. Digital advertising is the promotion of products and services via the internet through search engines, websites, social media, and other platforms that can be accessed online. It is automated and data-driven, involving data scientists, mathematicians, and computer programmers who, behind the scenes, use advanced statistical tools to optimize advertising campaigns, micro-targeting users and constantly tweaking algorithms.

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

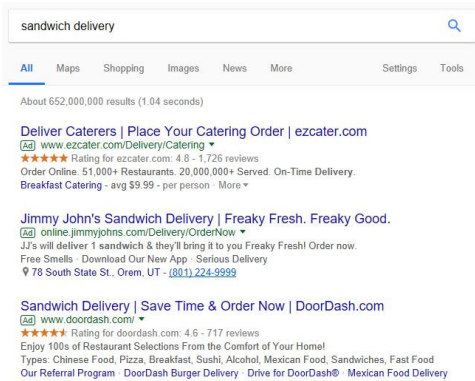
Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

~~29.38. Digital advertising is now the fastest growing segment of the advertising business in the United States. Digital advertising works differently. Businesses now aim to target not just a generalized audience with a shared characteristic, but specific individuals with unprecedented precision. More than half of all advertising money in the United States is now spent on digital advertising—approximately \$129 billion in 2019 and likely exceeding \$300 billion in 2021.~~

~~30.39. The two overarching markets in digital advertising are economy includes search advertising and display advertising, and social-media advertising markets.~~

~~31. Search advertising is the placement of advertisements—often blocks of bolded text—above or alongside the organic search results generated by a search engine, predominately Google Search. The advertisement targets those who are actually searching for a product or service; the advertisement appears when a consumer performs. Display of a search that has a connection to the product or service offered by company sponsoring the advertisement. The advertiser pays when the user clicks on the advertisement, ad is based on a cost per click. For example, if a user searches for sandwich delivery, the search advertising results may look like~~



~~this:~~

~~32.40. Search advertising is designed to reach customers who have already shown an interest in purchasing a product or service and may be close to making a purchasing~~

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Pattern: Clear (White)

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

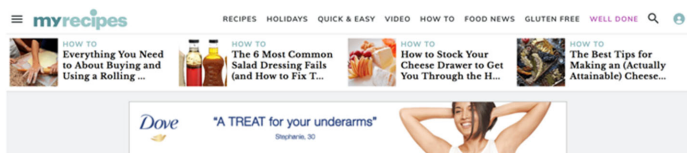
~~decision~~terms a web user inputs into the search engine. If, for example, a person finds herself locked out of her house and searches for nearby locksmiths on Google Search, search advertising will place ads for local locksmith services above the ~~organic~~ search results.

~~33.41.~~ Search advertising is limited, ~~however,~~ to prospective customers who affirmatively search for the advertiser's product or service or for something similar, or who input a related term. Thus, search advertising targets those who may be close to or already considering purchasing that product or service. The advertisement appears when a consumer performs a search linked to the product or service offered by the company sponsoring the advertisement. And the advertiser pays when the user clicks on the advertisement, on a cost-per-click basis.

~~34.42.~~ Display advertising, ~~in contrast,~~ is the advertising that appears next to content on websites. ~~Unlike~~distinct from search advertising, ~~which is generally limited to text, display~~ advertising comes in many forms, including banners, images, and videos. The display ads appear next to content on websites and on mobile apps. For instance, an ad for Dove soap might appear as a banner or sidebar on the cooking website "myrecipes":

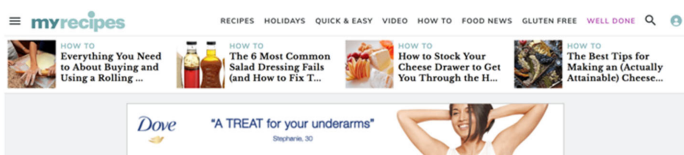
Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



Or as side bar ads, like this:

## The 5 Essential Baking Tools You Should Have in Your Kitchen



Or as side bar ads, like this:

## The 5 Essential Baking Tools You Should Have in Your Kitchen



With  
display

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

Display ads can also appear inside mobile applications, on social media, or in personal email boxes as text-only ads that expand into image ads when opened.

43. Display advertising, the internet user need fills a distinct marketing channel in directing users to the advertiser's website or mobile destination. Display advertising is based not perform a on the search terms the user inputs, but on specific search data and characteristics about the individual viewing a webpage. While search ads only appear to those who are already searching for the particular a product or service. Instead, the, the targeting of display ads is more general, based on various targeting parameters rather than input queries. Nearly all online advertisers place search ads, and a large majority also place display ads.

37.44. The key to effective display ads is placing them on websites personalized data about the individual user viewing the webpage. For example, if the advertiser knows certain characteristics about the user, such as interests, income, or location, the advertiser can target ads that are more likely to be viewed by the advertiser's target audience or by those most likely to of interest to that user. Similarly, if a merchant knows that a particular user showed interest in merchandise from the merchant's website but did not purchase the advertised products or services. A running shoe company, for example, would prefer to have it, the merchant can remarket that merchandise to "nudge" the user to return to the merchant's website and complete the purchase. This unique strategy also displays ads to users with a similar "cookie" profile as users who visited the merchant's website and/or clicked on its advertisements appear on sporting goods websites rather than websites selling car parts. In that scenario, even users who have not searched for running shoes will see the running shoe company's advertisement if they visit a website that publishes it.

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Space Before: 0 pt, Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

38. — Suppliers of display advertising ~~are website operators and are space~~, known as publishers ~~(e.g., providers of online news sites and other content creators)~~, are operators of websites application developers that have space available for display advertising. Publishers employ third-party tools to find advertisers ~~willing to purchase to purchase ad inventory~~. Programmatic advertising refers to marketing campaigns organized around an offer by a supply-side platform (SSP) and bids placed by a demand-side platform (DSP) over an ad exchange. Real-time bidding (RTB) is a form of programmatic buying that allows publishers to monetize the advertising space available on their websites.

39.45. ~~In 2019, \$69.9 billion was spent on digital display advertising website by selling inventory to buyers through an auction system. The entire auction occurs between the moment an internet user clicks on a link to a web page and the time the page is rendered on the user's screen—less than 120 milliseconds. Billions of such auctions occur daily. Approximately 86% of online display advertising space in the United States; 85% of that display marketing was advertising, 90% of which was executed through "programmatic," or automated, is bought and sold in real-time bidding. In 2020, spending on display media is expected to reach \$81.3 billion, a 14% year-over-year increase. time on electronic exchanges using real-time bidding.~~

40. — Display advertising accounts for approximately half of the digital advertising market, and many web publishers rely on display advertising for a major source of their revenue.

41.46. ~~As discussed in further detail below, search~~Search advertising and display advertising serve different purposes, and advertisers do not regard them as substitutes for each other. The Interactive Advertising Bureau—an advertising organization that develops industry standards and conducts research for the advertising industry—separates display and search for purposes of gathering and reporting annual revenues in these two advertising markets, and

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

1 further distinguishes advertising on owned-and-operated social-media websites from  
 2 programmatic real-time bidding for advertising on third-party websites and mobile apps.

3 **B. — Google Dominates and Controls Digital Advertising Services Markets**

4 42. — Google is the dominant supplier in the search advertising market and has moved  
 5 rapidly to control all stages of the display advertising market, as well. In 2019, Google's  
 6 corporate parent Alphabet earned \$135 billion, 84% of its total revenue, from search and display  
 7 advertising.

8 43. — Google's revenue derived from display advertising comes from ads placed on  
 9 Google's own properties (Google Maps, Gmail, etc.) and from acting as an intermediary in the  
 10 sale of ad space on third-party websites to advertisers.

11 44. — One of Google's key sources of revenue derives from its activities as the broker  
 12 between publishers and advertisers in programmatic display advertising. When an ad is viewed  
 13 on a third-party publisher's site, such as the *New York Times* website, Google pays the publisher  
 14 a share of the amount the advertiser paid to Google. The amount of revenue Google earns from  
 15 display advertising is dependent on the number of ads it sells, the price of those ads, and  
 16 Google's percentage margin or "cut" of the deal, also known as the "take rate."

17 45. — The "take rate" is the difference between what an advertiser pays for an ad and  
 18 what portion of that payment the publisher of the ad receives for placing the ad on its website.  
 19 Google's take rate as an intermediary is typically 54-61%. When ads are presented on Google  
 20 products, such as Google Search or YouTube, Google keeps the entire price of the ad.

21 46. — Google has a strong economic incentive to increase the number of ads placed on  
 22 its proprietary sites, to charge advertisers higher prices, and to pay as little as possible to  
 23 publishers displaying ads placed through Google on their websites.

24 **1. — Google's Search Advertising Practices and Market Share**

47. — As the owner of the dominant online search platform, Google is by far the largest  
 supplier of digital search advertising in the United States. Over the last ten years, Google's



share of the digital search advertising supply has ranged between 89% and 93%.

48. — Google makes space on its search results pages available to advertisers through an auction process that occurs each time a user runs a search. Google starts the auction by first finding all the ads with keywords matching the search. It then excludes ads that are considered ineligible based on certain criteria, such as country restrictions. Google then only displays ads with a sufficiently high “rank” based on a combination of factors, such as the advertiser’s bid, the quality of the ad, user location, and the device the user is using. Because the auction process is repeated for every search performed on Google Search, different auctions may lead to different advertisements being displayed.

49. — Although Google claims that it prices its search advertising through an auction, Google controls (and frequently raises) the price of its search advertising by setting a high reserve price. Doing so enables Google to directly set the price of its search advertisements because an ad will not sell unless its price meets or exceeds the reserve price, which thus operates as a floor. A majority of the winning bids for Google Search ads are at the reserve price.

## 2. — Google’s Dominance in the Ad Tech Stack and Display Advertising

50. — Google is also a major supplier of programmatic display advertising on its own properties and also owns multiple products that supply it. Google captures well over 50% of the market across the ad tech stack — the set of intermediary exchanges and platforms that advertisers and publishers use to buy, sell, and place display ads (“intermediation” services). Google owns and operates the leading dominant ad exchange, AdX, while also running buy-side and sell-side intermediary intermediation platforms trading on this exchange.

51. — YouTube, owned by Google, alone accounts for about 10% of the entire supply of display advertising. Other major Google products, such as Google Maps and Google Play, also offer display advertisements.

52. — Approximately 86% of online display advertising space in the United States is bought and sold in real time on electronic trading venues, referred to in the industry as

Formatted: Pattern: Clear

Formatted: Pattern: Clear

Formatted: Pattern: Clear

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

~~“advertising exchanges” or programmatic real-time bidding. Google owns and operates the dominant ad exchanges.~~

~~53.47. AdX.~~ The role of the ad exchange is critical in display advertising. Exchange transactions are the means by which ~~website~~ publishers monetize the attention they earn from web users and by which advertisers can maximize the impact of their ad spend. ~~As such, a competitive and transparent ad exchange is therefore essential~~ important to parties ~~on both sides of participating in the “ad stack,” at issue in this litigation.~~

~~54.48.~~ Relying on intermediaries like Google that route buy and sell orders from advertisers and publishers, the structure of ~~the ad~~ this broad market resembles the structure of electronically traded financial markets. Just as individual investors trade on financial exchanges through an intermediary brokerage firm, so ~~must~~ publishers and advertisers ~~go through a computerized intermediary~~ hire intermediaries to trade on advertising exchanges. But in display advertising, a single company, Google, simultaneously functions as the key intermediary through which buyers (advertisers) and suppliers (publishers) of display advertising trade, ~~and in addition to its position~~ as a leading publisher of display advertisements in its own right.

~~55. — On the buy side, advertisers use specialized software made either for small or large advertisers. Smaller advertisers, such as a local dry cleaner, typically use Google Ads, a self-serve online buying tool. Google Ads will bid on and buy ad space, including available inventory trading on Google’s exchange, in an automated fashion on the dry cleaner’s behalf. But in this process, Google can ultimately be the advertiser’s counterparty instead of its neutral agent.~~

~~56. — When an internet user clicks to visit a web page, in the milliseconds that it takes for that page to load, real-time auctions are occurring in the background to determine which ads~~

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

will display on the web page ~~that particular user will see~~. These auctions are run by supply side platforms (SSPs), exchanges, and demand side platforms (DSPs) in the ad tech stack.

57. ~~On the supply side of the exchange, suppliers — online publishers — of display advertising employ publisher ad servers (PAS) to accept, store, and manage ads; choose where and when ads appear; and track the effectiveness of ad campaigns. Each specific ad placement is determined based on bids from advertisers and/or preexisting arrangements between publishers and advertisers. Publishers rely on supply side platforms (SSPs) to run auctions, interface directly with their demand side equivalents, and optimize available inventory.~~

58.49. The demand ~~side is comprised~~ consists of advertisers and media agencies running advertising campaigns for businesses. Advertisers and media agencies rely on ~~advertiser~~ ad servers ~~(AAS)~~ and buying tools, including DSPs and mobile ad networks, to store ads, manage bids, purchase digital advertising, deliver the ads to publishers and applications, and record transactions. ~~Advertisers and media agencies also employ demand side platforms (DSPs) to purchase digital advertising by bidding in auctions and to manage their bids.~~

50. To offer supply, publishers use publisher ad servers (PAS) and in-app mediation services to accept, store, and manage ads; choose where and when ads appear; track the effectiveness of ad campaigns and optimize available inventory. Publishers and application developers rely on SSPs and in-app mediation services to optimize their available inventory of display advertising and interface with exchanges on which ad auctions occur and other sources of demand such as in-app ad networks.

59.51. The DSP connects to an ad exchange, which combines inventory from ad networks and SSPs with third-party data from a data management platform or data broker. When an ad space on a publisher's site becomes available, the ad exchange holds an auction in which the DSP bids on the impression submitted by the ad network or SSP. Ad exchanges thus serve as

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

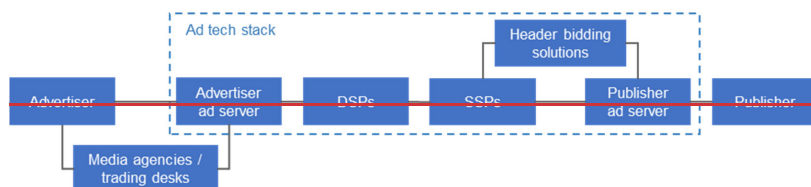
**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

the middlemen connecting publishers' ad servers on the sell-side to advertisers' buying tools on the demand-side.

52. Similarly, DSPs submit advertisers' bids for in-app impressions to exchanges including AdX, which compete with demand aggregated by in-app display networks, such as Google's AdMob and the Meta Audience Network (MAN) (formerly Facebook Audience Network, or FAN), to place advertising within applications whose developers have enabled one or more in-app mediation services. The in-app mediation service runs a final auction and awards the impression to the highest bidder among the various demand sources. To use such a mediation service, a developer must install and integrate the mediation service's software development kit ("SDK") into its app, which in turn is downloaded and installed on a user's mobile device. The SDK then interacts with the in-app mediation service, which solicits bids and selects winners from multiple demand sources including exchanges.

53. Together, the publisher ad servers (PAS), supply-side platforms (SSP), advertiserSSPs), ad servers (AAS), and demand-side platforms (DSP) comprise what is known as exchanges, advertisers' ad-buying tools, and in-app mediation services and networks make up the "ad tech stack." By connecting publishers and advertisers, an ad tech provider functions as an intermediary broker. The U.K.'s Competition and Markets Authority (CMA) depicted this market as follows:



**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

62. — Until fairly recently, different firms provided the various services in the ad-tech stack, and intermediaries did not own publishers or advertisers. Google lagged behind the pace of innovation and was not a key player in the development of online ad exchanges. Early players in virtual ad auctions recognized it was most efficient to interoperate with competitors and maintain a level playing field so that customers could mix and match products. During Senate testimony on September 15, 2020, digital marketing expert Adam Heimlich compared transacting in those earlier auctions to “owning a stall in a vast open-air market” — transparency was at a level where market participants could easily compare features, quality, and price with those of other participants within reach, and could use ad-stack services provided by a variety of providers. This is no longer the case. After a series of acquisitions, Google now dominates and controls the ad stack as a whole.

63. — Before Google’s entry, ad exchanges generally operated as disinterested brokers, similar to stock exchanges. Google saw the market efficiency of these early exchanges as a threat to its primary business of selling ads. It soon turned to a sustained mergers and acquisitions strategy to gain market dominance. Google’s acquisitions gave it access to and made it a major player at every level of the display advertising service industry, and have enabled Google to exclude competition through a variety of anticompetitive policies and activities.

## V. RELEVANT MARKETS

54. The following table lists the products used by advertisers in this case, lists the relevant antitrust markets for each type of product, and gives the current name of Google’s product in each such market. Google has monopoly or market power in all of these markets.<sup>1</sup>

Type of Product	Relevant Market	Google’s Product
-----------------	-----------------	------------------

<sup>1</sup> These are the relevant markets for all claims other than Claims III and IV, with respect to which the relevant market (the market for open display and in-app ad inventory traded in Google’s Final Clearinghouse Auctions) is described in the relevant sections, including at ¶ 294, *infra*.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

<u>Marketplaces for transacting programmatic display advertising</u>	<u>Exchanges</u>	<u>AdX</u>
<u>Advertisers' tools for buying web and in-app display advertising</u>	<u>Buying tools for small advertisers</u>	<u>Google Ads</u>
	<u>Buying tools for large advertisers</u>	<u>DV360</u>

55. Google's anticompetitive conduct in these markets for ad-buying tools and exchanges has resulted in Plaintiffs and other advertisers paying more to place ads through AdX, causing antitrust injury and giving rise to antitrust standing.

56. The relevant geographic market is the United States. Market participants recognize this in the ordinary course of business. For instance, Google offers display advertisers the ability to target and deliver ads based on the location of publishers or consumers in the United States. Google also separately tracks display advertising revenue for the United States.

**A. Exchanges**

**1. Exchanges in the United States Constitute a Relevant Antitrust Market.**

57. Exchanges for programmatic display advertising inventory ("exchanges") in the United States constitute a relevant antitrust product market. Exchanges are real-time auction marketplaces that match publishers' programmatic display impressions with bids from purchasers (whether submitted by an ad network on its own behalf or by a buying tool on behalf of an advertiser). Exchanges generally connect to a publisher's inventory through the publisher's ad server (e.g., Google's DFP server). Similarly, exchanges deal with advertisers by interfacing with and accepting live bids from networks and buying tools on behalf of advertisers (e.g., Google's DV360); advertisers cannot directly bid on an exchange.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

58. Exchanges have unique customers and exhibit unique features, pricing, and entry and usage requirements. Exchanges connect a publisher's available impression with a willing buyer who has returned a live bid. Thus exchanges do not bear inventory risk. As to pricing, exchanges charge a percentage of transaction value. Exchanges also typically impose eligibility requirements; most exchanges require publishers to meet minimum monthly requirements for impression volume and/or revenue in order to sell on the exchange. As most advertisers primarily place display ads indirectly through exchanges, publishers are compelled to make their inventory available in exchanges.

59. Trading in exchanges provides large publishers and advertisers with significant (and unique) controls to reduce problems of adverse selection, thereby increasing output. For instance, at least until Google imposed Uniform Pricing Rules, discussed below, publishers can calibrate price floors based on the advertiser and the consumer who will see the impression. Advertisers, in turn, can bid on and purchase individual impressions to reduce waste and target potential customers more effectively. Together, these features reduce instances of informational asymmetry associated with adverse selection problems, resulting in increased market output.

60. There are no reasonable substitutes for exchanges. A hypothetical monopolist imposing a small but significant and non-transitory increase in competitive pricing of exchange transactions would not cause a sufficient number of customers to switch to other means of selling and buying display inventory such that the price increase would be unprofitable. Similarly, a hypothetical monopolist imposing a small but significant and non-transitory decrease in the quality of exchanges from a competitive level would not cause a sufficient number of customers to switch to other means of selling and buying display inventory such that the quality decrease would be unprofitable.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

61. Exchanges are unique and not interchangeable with ad servers, web networks, in-app mediation tools and networks, buying tools for large advertisers, or buying tools for small advertisers. Those products have distinct sets of features and price points; none permits a publisher to sell an online impression directly to an advertiser without use of an ad exchange.

62. Nor are exchanges interchangeable with the direct sales channel. Selling directly requires substantial additional ongoing investment, different expertise, and a unique skill set on the part of both publishers and advertisers. For example, publishers and advertisers typically must hire and maintain internal staff to manage one-to-one advertising relationships. As a result, the direct sales channel tends to be reserved for very high-value transactions. Thus, a large online publisher like *The Wall Street Journal* typically does not deal directly with a local Ford dealership, including because the dealership's monthly ad spend would fall far below the publisher's minimum monthly commitment for direct-sale transactions, which are typically thousands of dollars per month. The same publisher would, however, readily transact with that dealership indirectly through an exchange, even if the total value of monthly transactions was just a few dollars.

63. Competition authorities worldwide likewise have recognized for many years that the direct display-ad sales channel is noninterchangeable with indirect, exchange-based sales. In its statement regarding Google's acquisition of DoubleClick, the FTC found "the evidence shows that ad intermediation is not a substitute for publishers and advertisers who place display ads into directly acquired ad inventory or vice versa." In its 2021 settlement with Google concerning anticompetitive practices in the exchange market, the French Competition Authority found that Google's exchange "is not restricted by the competitive pressure exerted by direct sales."

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



64. Selling a different form of advertising is not a feasible alternative to trading in an ad exchange. The format of the ads a publisher can sell depends on the format of that publisher's content. Other forms of digital advertising, such as in-stream video, social media, search, and in-app, are not substitutes for programmatic real-time bidding, and the ability to sell ads of those various forms requires distinct and substantial investments in content and technology.

65. Nor would purchasing a different form of advertising, such as in-stream video, social media, search, and in-app, be a viable substitute for advertisers. An advertiser requiring web display advertising would not switch to in-stream video, social media, or search in response to an increase in the price of purchasing display advertising through an ad exchange.

66. Industry participants define exchanges as facilitators of real-time auctions and as noninterchangeable with networks.

67. Google's internal documents confirm that exchanges are a distinct product market. Google analyzes market share with reference only to other exchanges (instead of accounting for ad servers, ad networks, or ad-buying tools). Google measures its exchange market share in terms of share by exchange market revenue or exchange impression volume. In documents dating back to 2011, Google has identified only other exchanges as "key competitors" to its exchange.

68. Google also recognizes that direct sales, exchanges, and networks are distinct. A 2020 Google presentation entitled "Display Business Overview" separately refers to the direct sales channel ("Reservations"), exchanges ("RTB"), and networks, stating: "Conceptually, there are 3 ways Display transacts between adv[ertiser]s and pub[lisher]s: Reservations, RTB, and Network." The document further explained that "[d]isplay is not a monolithic business: within it, there are three paths for transactions, each with distinct characteristics. Reservation: Direct

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

transactions between advertisers and publishers ... RTB: Auction connecting advertisers and publishers (primarily large, sophisticated ones), and giving them significant controls. Demand and supply are disaggregated ... Network: Closed demand- supply loop, primarily between smaller advertisers and publishers; high degree of automation.”

69. The relevant geographic market for exchanges is the United States. Exchanges that are only available in other countries are not substitutes for exchanges located in the United States. The overwhelming majority of publishers and advertisers that use exchanges in the United States are seeking to connect to supply or demand also within the country. Publishers can obtain the most money for their ad inventory by placing ads that are relevant to users that visit their site, and advertisers can obtain the most return on investment by placing ads adjacent to content that is relevant to the advertiser’s business. Thus, exchanges connecting publishers to demand or connecting advertisers to supply that do not share linguistic, cultural, and commercial characteristics are not substitutes for exchanges that do.

70. Further, publishers and advertisers who use an exchange in the United States are subject to different regulatory and legal systems that affect their choice of exchange. Laws and regulations concerning competition, user privacy, and deceptive trade practices vary from country to country. Publishers and advertisers in the United States cannot choose an exchange that does not operate in a manner consistent with their regulatory obligations.

71. Network latency based on geography also affects what exchange a publisher or advertiser uses. Publishers and advertisers prefer to use exchanges that are hosted on servers within a reasonable geographic distance from the publisher’s ad server or the advertiser’s buying tool. An exchange located outside the United States could not return bids to publishers in the United States in a timeframe that would be competitive with exchanges located in the United

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

States. Nor could an exchange located outside the United States transmit bid requests to buying tools in a timeframe that would be competitive with exchanges located within the United States.

72. Google tracks its share of exchanges by country because it acknowledges that users from different nationalities have different levels of demand for their exchange. Although Google tracks market share both globally and regionally as well, the fact that Google monitors its market share for exchanges in the United States geographic market shows that Google regards demand for its exchange in the United States as distinct from the demand for its exchange in other geographic markets.

73. A small but significant and non-transitory increase in the competitive pricing of exchanges in the United States would not cause a sufficient number of customers to switch to exchanges outside of the United States such that the price increase would be unprofitable. Exchanges that are available in other countries but not available in the United States connect to sources of demand that are not relevant to users that visit a publisher's webpage located in the United States. Similarly, exchanges in other countries but not available in the United States offer impressions adjacent to content that is not desirable or relevant to advertisers located in the United States. Accordingly, exchanges available in other countries that are not available in the United States are not reasonable substitutes for exchanges available in the United States.

## **2. Google Has Monopoly Power in the Exchange Market.**

74. Google has a monopoly in the exchange market in the United States, as confirmed by both indirect and direct evidence.

75. Google's exchange has had market power since 2010 because it contains a significant and unique pool of advertisers not available through any other exchange—the bids belonging to the hundreds of thousands of advertisers using Google's monopoly buying tool for

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

small advertisers, Google Ads. The collective pool of advertisers bidding through Google Ads on AdX accounts for at least 44 billion programmatic display transactions per month in the United States and about 30 percent of monthly transactions across all exchanges in the United States. To put inventory up for bid to this significant pool of advertisers, publishers must transact in Google's exchange: Google routes these advertisers' bids to only Google's exchange, and the advertisers typically buy only through Google Ads. Thus, publishers must transact in Google's exchange to receive bids from and sell their inventory to this important pool of advertisers.

76. Google routes advertisers' purchases on Google Ads through AdX, and advertisers bidding through Google Ads account for a large share of transactions on this exchange. Internal documents show that in 2012 and 2013, advertisers using Google Ads accounted for 65 to 74 percent of transactions on Google's AdX exchange, as measured by revenue. Between 2018 and 2019, advertisers using Google Ads purchased 52 percent of impressions transacted on Google's exchange.

77. Publishers who forgo Google's exchange and the demand from Google Ads advertisers see substantial decreases in the number of bids for their inventory, the number of impressions they sell, and the amount of revenue they generate. Hence because the demand flowing through Google Ads is both significant and unique, participating in Google's exchange is a "must" for nearly all publishers.

78. Google touts this "must have" selling point to publishers, stating that "higher yield starts with access to demand .... AdX is the only platform with direct access to the entirety of [Google Ads] demand." Elsewhere, Google explains that AdX offers "massive demand" with "seamless access to [Google Ads]."

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

79. For publishers, Google's exchange cannot be bypassed. In 2014, industry trade publication Digiday observed that "Google is the operator of the largest ad exchange, AdX." By 2015, 80 percent of the publishers using Google's ad server also contracted with Google's exchange. Given that 90 percent of publishers were already using Google's ad server, it follows that the large majority of publishers were using Google's exchange.

80. In 2019, *The Wall Street Journal* reported that AdX was "the world's largest [exchange] with about half [of] the [overall worldwide] market share." It follows that AdX controls substantially more than half of the United States exchange market because AdX is used by advertisers, more publishers, transacts more revenue, and transacts more volume in the United States than in other countries, according to Google's internal documents. In the twelve months leading up to October 2019, AdX transacted over 60 percent of all display inventory sold through exchanges in the United States.

81. Since then, Google has further expanded its power in the exchange market, with AdX's share of impressions further increasing after it imposed Unified Pricing Rules in 2019, just as Google internally predicted. Thus, analysis of one large publisher's auction records show a substantial increase in the percentage of display inventory sold on AdX once Google imposed its Unified Pricing Rules.

82. In June 2021, the European Commission opened an antitrust investigation to assess whether Google violated EU competition rules by favoring its own online display advertising technology services in the ad tech supply chain, to the detriment of competitors, advertisers and publishers. This investigation showed that Google Ad Manager (commonly known as "GAM"), which is Google's re-branded name for its combination of its AdX ad server and DFP, now has an approximate 90% share in the UK, and that in transactions where both

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

Google Ads and AdX are used (a *de facto* requirement for small advertisers), Google's overall take rate is approximately 30% of advertisers' spend.

83. While Google's AdX is not the only exchange in the United States, its remaining competitors (the exchanges offered by Rubicon, Xandr, and Index Exchange) each hold considerably smaller market shares. These rival exchanges cannot offer publishers access to Google Ads demand. AdX transacts in excess of 60 percent of display impressions. Data from large publishers show the other three exchanges each typically transact only four to five percent. From a revenue standpoint, as well, those other exchanges transact far less than AdX. In 2018, Google's exchange generated at least \$7.6 billion in gross revenue. Xandr generated less than \$2 billion and Rubicon and Index Exchange each generated less than \$1 billion. Estimates from Rubicon further show that, excluding Google's exchange, all other exchanges combined transacted a total of approximately \$6 billion. Thus, the minority non-Google portion of the exchange market is highly fragmented. Rubicon's estimates also show that AdX held 64 percent of the market available to exchanges, in terms of ad spend, in 2019 and that this share was expected to grow to 69 percent by 2023 at the expense of other exchanges. Between 2018 and 2019, the increase in AdX's revenue was about five times the amount of the corresponding increase for Xandr, and this differential over time has increased the relative size difference between AdX and its nearest competitors.

84. Google's own employees have recognized its exchange market power. In a 2015 email, Google employees expressed concern that Google might "actually have to compete" with other exchanges in the future.

85. Google's power to raise prices above competitive levels in the exchange market reflects its power. Since at least 2016, Google's exchange has charged supra-competitive prices.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

with an average take rate of 20 percent of the transaction value. Google charges substantially more than its closest exchange competitors, yet its share of the exchange market continues to grow.

86. Google's exchange is insulated from competition. In 2016, after widespread adoption of header bidding, a price war between exchanges began, and *non*-Google exchanges began cutting their prices. In 2017, several exchanges revealed their recent price cuts to industry publication AdExchanger: "Less than a week after Rubicon Project slashed its take rate in half, to 10% to 12% ... AppNexus [now Xandr] said its fees are even lower. The company revealed it charges an 8.5% average to the sellers on its platform." Despite these significant price cuts, these rival exchanges were unable to materially increase their market share. Simultaneously, Google's exchange maintained or increased prices while *increasing* its market share. A Google employee emailed internally in November 2017 that she thought exchange "margins will stabilize at around 5 percent. Maybe it will happen by this time next year or in early 2019. This creates an obvious dilemma for us. AdX is the lifeblood of our programmatic business. ... What do we do?" Google's 2018 internal documents state that "[r]ecent market dynamics ... are putting pressure on the 20% fee and it is becoming more clear that the market bears the fee primarily because of the exclusive access to our [Google Ads] demand." By 2019, Google had increased its exchange take rate for third-party buyers by one to two percentage points, which was a six to ten percent price increase relative to those rates in 2017. The fact that Google did not lower its exchange take rates during this time—and instead increased them without losing market share—demonstrates that Google's exchange has pricing power and is insulated from competition.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

87. Moreover, Google's exchange does not lose market share even though its customers perceive its exchange to be of lower quality than other exchanges on key dimensions. A 2018 survey asked publishers to evaluate exchanges across various dimensions of quality. Google trailed competing exchanges in all five of the key quality dimensions and ranked last in two of the five key dimensions. Notably, Google ranked last in the measure of "alignment with publisher goals and needs." In 2019, a column in AdExchanger observed that publishers continue to use Google's exchange not because of superior quality, but because of "the demand that Google brings through its buy-side and exchange-related dominance." According to a survey of publishers by Advertiser Perspectives (an advertising industry business intelligence agency), Google's exchange is the "dominant gateway for online advertising"—Google's exchange is "always No. 1" and has "real dominance."

88. The exchange market also is characterized by market exit and lack of recent entry. Microsoft (AdECN) exited the exchange market in 2011, Yahoo! (RMX) in 2015, and Facebook (FBX) in 2016.

89. Google's market power in the exchange market is protected by significant barriers to entry and expansion. A new entrant must achieve a sufficient scale of *both* publishers *and* advertisers using its exchange if it hopes to become viable. Google exploits this barrier to benefit its own exchange and erect further barriers to entry. Google creates barriers for rival exchanges including by causing its publisher ad server to preferentially route transactions to Google's exchange and by preferentially routing Google Ads transactions to Google's exchange.

#### **B. Ad-Buying Tools**

90. Advertisers use buying tools to purchase inventory and to deliver their ads to publishers via ad exchanges. There are two distinct types of buying tools—those for small-to-



medium advertisers (“small advertisers”) and those for large advertisers—and these two types of buying tools are generally not interchangeable with each other.

91. Internally, Google recognizes this distinction. For instance, Google refers to the customers of its ad-buying tool for small advertisers (Google Ads) as “tail and torso advertisers,” noting this category typically includes small-to-medium advertisers such as “Bob’s Barber.” On the other hand, Google refers to the customers of its ad-buying tool for large advertisers (DV360) as “large buyers” which include agencies and trading desks, as well as the large advertisers who are a “good fit” for DV360.

92. Advertisers purchase both web display and in-app advertisements through Google’s ad-buying tools. In fact, Google Ads includes Search, Display, and In-App as defaults when an advertiser sets up a campaign on Google Ads.

**1. Buying Tools for Small Advertisers in the United States Constitute a Relevant Antitrust Market.**

93. Programmatic display buying tools for small advertisers (“buying tools for small advertisers”) in the United States constitute a relevant antitrust market. These tools provide a web interface for advertisers to use to bid on and purchase programmatic display inventory across exchanges and networks.

94. Buying tools for small advertisers exhibit unique characteristics. Broadly speaking, these tools provide small advertisers with a user interface to: (1) set up their display-ad campaigns; (2) input and modify their bidding strategies (e.g., their maximum bids for particular types of inventory); (3) specific particular websites where they would like their ads to run; (4) specify the types of audiences they want to target (e.g., based on users’ geography, education level, interests, or parental, marital, or homeownership status, etc.); (5) acquire campaign

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

performance reports; and (6) adjust campaign parameters, including budget, maximum bids, list of websites, and user targets to optimize campaign performance over time. Working with the parameters set by the advertiser, the buying tool will then automatically bid on the advertiser's behalf for ad inventory trading on an exchange or network. These tools generally are unable to bid on inventory that is available only outside of an exchange or network (e.g., Facebook's ad inventory).

95. Importantly, these buying tools are the only way small advertisers are able to disseminate their display advertisements to users across the open web (i.e., on websites whose inventory is available via an exchange or network). Additionally, an advertiser can use such a tool to access inventory from millions of websites available on networks.

96. Buying tools for small advertisers have minimal usage requirements. For instance, Google Ads has no minimum monthly spend requirement. An advertiser could spend just a few dollars each month purchasing ad space trading in networks and exchanges.

97. Buying tools for small advertisers serve a unique set of customers. Because these tools have low or no minimum monthly requirements, customers tend to be small businesses who are otherwise priced out of the more sophisticated buying tools for large advertisers. Customer examples include lawyers, real estate agents, photographers, plumbers, builders, doctors, barber shops, start-ups, and car dealerships.

98. Google recognizes that the set of customers served by buying tools for small advertisers (Google Ads) is unique and distinct from the set of customers served by buying tools for large advertisers (DV360); as Google's sales training materials acknowledge, "[o]n the spectrum of increasing advertiser sophistication, from small businesses to large direct advertisers to agencies, there comes a point of discontinuity where the needs of the buyer fundamentally

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

change.” Internally, Google refers to customers of its small advertising buying tool (Google Ads) as “small advertisers,” “tail and torso advertisers,” and “medium advertisers,” which would be “not a good fit” for the more sophisticated and costly buying tools for larger, more sophisticated advertisers that tend to use DV360.

99. As such, an additional critical feature of buying tools for small advertisers is that they are simple and easy to use; the businesses that use them typically do not have the resources to manage and utilize complex functionality. On the other hand, the enterprise buying tools for large advertisers are considerably more complex; using them typically requires a high minimum spend and a specialized team of people to operate and manage display campaigns. Small advertisers lack these resources.

100. There are no reasonable substitutes for buying tools for small advertisers. A hypothetical monopolist imposing a small but significant and non-transitory increase in competitive pricing of buying tools for small advertisers would not cause a sufficient number of customers to switch to other means of buying display inventory such that the price increase would be unprofitable. Similarly, a hypothetical monopolist imposing a small but significant and non-transitory decrease in the quality of buying tools for small advertisers from a competitive level would not cause a sufficient number of customers to switch to other means of buying display inventory such that the quality decrease would be unprofitable.

101. As Google recognizes, buying tools for small advertisers are unique and not interchangeable with the buying tools for large advertisers. Google’s small advertiser buying tool (Google Ads) is used by many thousands of small advertisers in the United States spending several hundred dollars or less a month on display advertising. These advertisers’ individual

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

monthly spend falls far short of the high minimum monthly spend requirements for using the enterprise buying tools for large advertisers.

102. Neither are buying tools for small advertisers interchangeable with ad servers, web networks, in-app mediation tools, in-app networks, or exchanges. Those products do not provide small advertisers with tools to run and optimize ad campaigns or to purchase programmatic display inventory across networks and exchanges. Those products also have different features sets and exhibit different entry and usage requirements.

103. Purchasing ad inventory through direct sales channels is not interchangeable with purchasing ad inventory through buying tools for small advertisers. As discussed above, Google and other industry participants recognize that the open display sales channel is distinct from the direct sales channel. Moreover, purchasing advertising through direct deals is not a realistic possibility for small advertisers given the high minimum spend requirements and the resources needed to negotiate deals directly with publishers.

104. Nor would purchasing a different form of advertising (e.g., in-stream video, social media, or search) be a viable substitute for advertisers. Advertisers regard each of these ad formats as distinct and noninterchangeable, typically choosing the suitable type of advertising depending on the goals of a particular ad campaign. An advertiser requiring display advertising would not switch to in-stream video, owned-and-operated social-media advertising, or search ads in response to an increase in the price or degrading of the quality of a buying tool for purchasing open web and in-app display advertising. Regulators in the United States and around the world have found that search advertising does not operate as a significant competitive constraint on display advertising, and vice versa. Google's internal documents likewise track search and display advertising separately.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

105. A recent natural experiment further demonstrates the non-interchangeability of owned-and-operated social-media advertising with open web and in-app display advertising. In mid-2020, Facebook faced intense public backlash for hosting “damaging and divisive” content. In July of that year, a sizable group of advertisers (both small and large) responded by halting their Facebook advertising campaigns in a “boycott” of advertising within the Facebook social-media site and app. The stage was therefore set for an unprecedented natural experiment on the degree of substitutability between, on the one hand, owned-and-operated social-media advertising and, on the other, open web and in-app display advertising (and, correspondingly, the distinct tools used to purchase each). If the two were interchangeable, the advertisers boycotting Facebook would re-allocate their spend through display buying tools. But this is not what happened. Rather, small and large advertisers alike instead overwhelmingly diverted their ad spend to *other owned-and-operated social-media* sites (e.g., Snapchat and Pinterest). Additional evidence further supports this lack of interchangeability; if the advertisers boycotting Facebook shifted spend to advertising on the open web, the resulting increase in demand would lead to higher auction prices for ad inventory on the open web or in-app display. But this did not happen either—a review of major web publishers’ open-web display inventory data does not show price increases during the boycott. Hence, this unique natural experiment confirms that advertisers do not consider these two types of advertising (and likewise, the separate buying tools) to be interchangeable.

106. Neither are buying tools for small advertisers interchangeable with tools for purchasing social-media advertising, e.g., on Facebook. While advertisers can, of course, use Meta’s buying tool (“Facebook Ads”) to purchase display ads on Meta’s properties (e.g., on facebook.com), they cannot use it to purchase inventory on other websites (e.g., wsj.com).

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

107. The U.K.'s Competition Markets Authority's (CMA) investigation and accompanying 2020 report includes a section on competition and market shares in regard to buying tools; that section lists only those tools able to purchase inventory across the open web—it does not include Facebook Ads or Amazon's Ad Console.

108. Buying tools for small advertisers are not interchangeable with any tools offered by Amazon for purchasing ad inventory. Amazon does offer a buying tool for large advertisers, but that tool has a minimum monthly spend requirement of \$35,000, which puts it well out of reach for small advertisers. It is not a substitute for small advertiser buying tools in programmatic real-time bidding markets. Amazon's other ad-buying tool (the Amazon Ad Console) is available only to advertisers who are also registered Amazon vendors. These vendors purchase ads through Amazon Ad Console solely to promote the goods they sell on Amazon (e.g., the "sponsored" ads appearing in response to a search on amazon.com). They cannot use the Amazon Ad Console to purchase display ads on third-party sites (e.g., ads on dallasnews.com, law360.com, or walmart.com). An internal research document from Amazon includes an advertiser's explanation of the value proposition of advertising on Amazon, which is distinct from the reasons advertisers purchase display advertising on the open web: "Amazon is all about shopping conversion," while in comparison, "[w]ith other platforms (i.e., not Amazon), we're building a brand and we're using digital display ads to do that. We don't necessarily look at conversions for display. We look at reach for display and making sure that we're featured in the right targeted websites."

109. Internally, Google recognizes that buying tools for small advertisers make up a relevant product market and that buying tools for large advertisers are in a different product market. Google's internal presentations and documents distinguish between the two types of

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

tools in terms of the distinct product features they provide and different groups of customers they serve. Google participates in the two markets by offering two distinct products: Google Ads is for small advertisers, and DV360 is for large advertisers.

110. The relevant geographic market for buying tools for small advertisers is the United States. Buying tools for small advertisers that are only available in other countries are not substitutes for buying tools for small advertisers located in the United States. The overwhelming majority of advertisers that use buying tools for small advertisers in the United States are seeking to bid on and purchase ad inventory that is also located in the United States. Advertisers can obtain the most return on investment by placing ads adjacent to content that is relevant to the advertiser's business. Thus, buying tools for small advertisers that connect advertisers to ad inventory that does not share the linguistic, cultural, or commercial characteristics of the advertiser are not substitutes for buying tools for small advertisers that do share those characteristics.

111. Further, advertisers who use buying tools for small advertisers in the United States are subject to different regulatory and legal systems that affect their choice of buying tool. Laws and regulations concerning competition, user privacy, and deceptive trade practices vary from country to country. Small advertisers in the United States cannot use a buying tool that does not operate in a manner consistent with their regulatory obligations.

112. Network latency based on geography also affects what buying tool for small advertisers an advertiser chooses. Advertisers prefer to use buying tools for small advertisers that are hosted on servers within a reasonable geographic distance from the ad exchange or publisher's ad server. Buying tools for small advertisers located outside the United States could not return bids to publishers in the United States in a timeframe that would be competitive with

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 buying tools for small advertisers located in the United States. Nor could buying tools for small  
 2 advertisers located outside the United States transmit bid responses to ad exchanges in a  
 3 timeframe that would be competitive with buying tools for small advertisers located within the  
 4 United States.

5 113. Google tracks its market share of buying tools for small advertisers by country  
 6 because it acknowledges that users from different nationalities have different levels of demand  
 7 for Google Ads. Although Google tracks market share both globally and regionally as well, the  
 8 fact that Google monitors its market share for Google Ads for the United States geographic  
 9 market shows that Google regards advertiser demand for buying tools for small advertisers in the  
 10 United States as distinct from the demand for buying tools for small advertisers both regionally  
 11 and globally.

12 114. A hypothetical monopolist imposing a small but significant and non-transitory  
 13 increase in the competitive pricing of buying tools for small advertisers in the United States  
 14 would not cause a sufficient number of customers to switch to buying tools for small advertisers  
 15 outside of the United States such that the price increase would be unprofitable. Buying tools for  
 16 small advertisers in other countries that are not available in the United States offer impressions  
 17 adjacent to content that is often undesirable, irrelevant, or not brand safe for advertisers located  
 18 in the United States. Accordingly, buying tools for small advertisers available in other countries  
 19 that are not available in the United States are not reasonable substitutes for buying tools for small  
 20 advertisers available in the United States.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



**2. Google Has Monopoly Power in the Buying Tools Market for Small Advertisers.**

115. Google has had monopoly power in the United States in the buying tools for small advertisers market since 2009. Google Ads has served far more digital advertisers than any other competing buying tool in the United States. In 2010, 600,000 small and medium size businesses in the United States used Google Ads. Since then, the number of advertisers using this service to purchase display inventory has increased exponentially. At all relevant times, competing advertising tools for small advertisers served far fewer advertisers.

116. By 2012, Google Ads had become so dominant that Google employees noted they were “artificially handicapping” Google Ads to “boost the attractiveness of our sellside (AdX).” The implication is that Google’s monopoly power over small advertisers’ buying tools allowed Google to reduce the quality of Google Ads without concern that advertisers would switch to an alternative.

117. Google Ads is the largest buyer on the world’s largest exchange, Google’s AdX. Google Ads buys about 50 percent of the web display impressions transacted in Google’s exchange, accounting for about 30 percent of *all* web display impressions transacted across all exchanges in the United States. Internal Google documents estimate that in 2013, Google Ads was “the largest buyer on AdX, comprising 74% of AdX revenue.”

118. Most buying tools for small advertisers have exited the display market entirely, leaving small advertisers without a realistic alternative to Google Ads. Meta previously offered a buying tool known as the Meta Audience Networks (MAN) (formerly, Facebook Audience Network, or FAN) for small advertisers to purchase display inventory across the open web (separate from its buying tool for purchasing inventory on Meta’s owned and operated

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

properties), but Meta stopped offering web display through this buying tool in 2020 and today only offers in-app display advertising. Amazon does not offer a tool that small advertisers can use to purchase open web display inventory. In 2012, Google internally compared Google Ads to eight competitors; out of those eight competing buying tools, not one still operates as a buying tool for small advertisers seeking to place open display advertising on the web.

119. Small advertisers also almost always “single home” (i.e., use just one buying tool at a time), as using multiple tools at the same time would impose substantial additional time and capital costs small advertisers typically cannot bear. When deciding which buying tool to use, most small advertisers choose Google Ads because it is required to disseminate search advertisements through Google, is the only way to purchase display across the Google Display Network, and essentially is the only tool available to place display ads across the open web. Unless advertisers manually opt out, Google Ads also places in-app display ads on mobile devices.

120. Google Ads’ monopoly power is reflected in its refusal to route most of its small advertisers’ bid responses to identical but less expensive display inventory trading in non-Google exchanges and networks. Small advertisers’ marketing costs would decrease if Google Ads did this. But because Google Ads faces no real competition, Google has no incentive to provide lower prices to its small advertiser clients.

121. Further evidence of Google Ads’ monopoly power in this market is found in the non-transparent pricing Google imposes, including in charging non-transparent fees to advertisers when they purchase impressions via Google’s exchange. In a discussion between Google employees about Google Ads’ fees, one employee asked: “Buyers don’t know that [we]

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

take a 15 percent fee? I didn't realize that." Another clarified that the fee "is not transparent."

Google's monopoly power thus allows it to hide the details of the prices it charges to advertisers.

122. Google Ads' monopoly power also is protected by at least three critical barriers to entry and expansion. First, Google controls over 90 percent of search ad inventory and leverages its market power over search-ad inventory into the display advertising markets for ad-buying tools. The importance of search inventory for advertisers makes Google Ads an extremely popular buying platform, with a very large advertiser base. Advertisers using Google Ads for their search campaigns can easily extend the scope of their campaigns to display and in-app mobile advertising.

123. Second, Google Ads charges opaque fees and does not let advertisers readily audit the ad inventory Google purchases on their behalf. Without a legitimate mode of comparison, small advertisers are hindered from switching to a lower-cost or higher-quality small advertiser buying tool.

124. Third, advertisers use ad-buying tools to keep track of the users they have targeted with ads, the users that have made purchases, and the users that they want to keep targeting with more ads. But Google Ads limits advertisers from accessing and taking this data with them to a rival buying tool. As a result, small advertisers are locked in and have high switching costs. A small advertiser looking to switch to a different ad-buying tool typically would need to start over from scratch after giving up the valuable data and intelligence they otherwise accumulated in Google Ads.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

**3. Buying Tools for Large Advertisers in the United States Constitute a Relevant Antitrust Market.**

125. Programmatic display buying tools for large advertisers (“buying tools for large advertisers”) in the United States constitute a relevant antitrust market. These tools provide an interface for large advertisers (e.g., Geico or McDonalds) or their trading desks and ad agencies (e.g., WPP, Group M, Publicis, or Accuen) (collectively, “large advertisers”) to bid on and purchase open-web and in-app display-ad inventory on exchanges and networks. Buying tools for large advertisers allow advertisers to optimize their campaigns to achieve their campaign objectives, including purchasing the best quality inventory on exchanges for the lowest prices.

126. Buying tools for large advertisers provide a range of product features in addition to the features typical of tools for small advertisers. These additional features commonly include the ability to: (a) conduct substantially more complex and precise site, user, and audience-based targeting; (b) use more of an advertiser’s own proprietary data; and (c) create and deploy highly customized bidding strategies across marketplaces.

127. The buying tools for large advertisers require dedicated and specialized teams of people to manage. The bidding and trading options are so complex that they frequently are not used or managed in-house by the actual advertiser. Instead, they are usually managed by the advertiser’s specialized team at a third-party ad agency or at a specialized agency division called a “trading desk.”

128. Ad-buying tools for large advertisers exhibit unique entry and usage requirements. Unlike ad-buying tools for small advertisers, these tools typically have very high monthly minimum spend requirements. For example, according to competitive intelligence

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

gathered by Amazon, The Trade Desk's buying tool requires advertisers to spend at least \$1 million per year, and Google's own DV360 requires at least \$10 million per year.

129. These ad-buying tools offer features that serve a particular type of customer: large advertisers. Internally, Google describes the unique types of customers who license these tools as "large buyers" such as "agencies," "trading desks," and "large advertisers."

130. There are no reasonable substitutes for buying tools for large advertisers. A hypothetical monopolist imposing a small but significant and non-transitory increase in competitive pricing of buying tools for large advertisers would not cause a sufficient number of customers to switch to other means of buying display inventory such that the price increase would be unprofitable. Such a price increase would not cause a sufficient number of customers to switch to using buying tools for small advertisers, ad servers, exchanges, networks, advertising on owned-and-operated sites, such as social-media sites (e.g., Facebook's social-media properties), or advertising on Amazon so as to render the price increase unprofitable. Similarly, a hypothetical monopolist imposing a small but significant and non-transitory decrease in the quality of buying tools for large advertisers from a competitive level would not cause a sufficient number of customers to switch to other means of buying display inventory such that the quality decrease would be unprofitable. Such a quality decrease would not cause a sufficient number of customers to switch to using buying tools for small advertisers, ad servers, exchanges, networks, or advertising on social-media sites or on Amazon such that the quality decrease would be unprofitable.

131. The tools for small advertisers do not provide large advertisers with the unique features they need to manage their large and complex ad campaigns. Industry sources discuss competitors in this specific market and list its unique characteristics and customers. A research

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

document by Amazon characterized buying tools for large advertisers as providing “nearly limitless levels of configurability including the ability to adjust settings that directly influence auction dynamics,” and contrasted these product features to the “more automated” functionality offered by buying tools for small advertisers. Thus, buying tools for large advertisers are unique and not interchangeable with the buying tools for small advertisers.

132. Neither are buying tools for large advertisers interchangeable with ad servers, web networks, in-app mediation tools, in-app networks, or exchanges. Those products do not provide advertisers with tools to optimize ad campaigns and purchase programmatic display inventory across networks and exchanges. Those products also have different sets of features and exhibit different entry and usage requirements. Many suppliers of buying tools for large advertisers, such as The Trade Desk, do not offer networks or exchanges.

133. Buying tools for large advertisers also are not interchangeable with the direct sales channel. Google and other industry participants recognize that the indirect sales channel is distinct from the direct sales channel.

134. Nor would purchasing a different form of advertising (e.g., in-stream video, social media, or search) be a viable substitute for advertisers. Advertisers regard each of these ad formats as distinct and noninterchangeable, typically choosing the suitable format depending on the goals of a particular ad campaign. An advertiser requiring display advertising would not switch to in-stream video, social media, or search ads in response to an increase in the price or degrading of the quality of a buying tool for purchasing open web display advertising. Thus, large advertisers who participated in the Facebook boycott described above reallocated their spend primarily to owned-and-operated social-media sites (e.g., Snapchat and Pinterest), not to display advertising on the open web.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

135. Neither are buying tools for large advertisers interchangeable with tools for purchasing social-media advertising. While advertisers can use Facebook's buying tool ("Facebook Ads") to purchase display ads on Facebook properties (e.g., on facebook.com), they cannot use it to purchase inventory on other websites. Nor can they use Facebook's tools to perform other crucial functions of a buying tool for large advertisers.

136. Competition authorities in other countries have recognized that ad-buying tools for large advertisers are not interchangeable with other products. The UK's CMA found that these tools offer unique functionality and are not interchangeable with exchanges, networks, or ad servers. The French Competition Authority likewise concluded that buying tools for large advertisers are not substitutable for exchanges or networks.

137. Google itself treats buying tools for large advertisers, such as its DV360 product, as occupying a standalone product market. For purposes of its internal analysis of DV360's market share, Google does not consider its own buying tool for small advertisers (Google Ads) as operating in the same market. In 2010, Google paid \$81 million to acquire Invite Media for the purpose of developing a product targeting large advertisers, separate from Google's already-existing buying tool for small advertisers.

138. The relevant geographic market for buying tools for large advertisers is the United States. Buying tools for large advertisers that are only available in other countries are not substitutes for buying tools for large advertisers located in the United States. The overwhelming majority of advertisers that use buying tools for large advertisers in the United States are seeking to bid on and purchase ad inventory also within the country. Advertisers can obtain the most return on investment by placing ads adjacent to content that is relevant to the advertiser's business. Thus, buying tools for large advertisers that connect advertisers to ad inventory that do

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

not share the linguistic, cultural, or commercial characteristics of the advertiser are not substitutes for buying tools for large advertisers that do.

139. Additionally, advertisers who use buying tools for large advertisers in the United States are subject to different regulatory and legal systems that affect their choice of buying tool. Laws and regulations concerning competition, user privacy, and deceptive trade practices vary from country to country. Large advertisers in the United States cannot use a buying tool that does not operate in a manner consistent with their regulatory obligations.

140. Network latency based on geography also affects what buying tool for large advertisers an advertiser chooses. Advertisers prefer to use buying tools for large advertisers that are hosted on servers within a reasonable geographic distance from the ad exchange or publisher's ad server. Buying tools for large advertisers located outside the United States could not return bids to publishers in the United States in a timeframe that would be competitive with buying tools for large advertisers located in the United States. Nor could buying tools for large advertisers located outside the United States transmit bid responses to ad exchanges in a timeframe that would be competitive with buying tools for large advertisers located within the United States.

141. Google tracks its market share of buying tools for large advertisers by country, recognizing that users from different nationalities exhibit different levels of demand for DV360. Although Google tracks market share both globally and regionally as well, the fact that Google monitors its market share for DV360 for the United States geographic market shows that Google regards advertiser demand for buying tools for large advertisers in the United States as distinct from the demand for buying tools for large advertisers both regionally and globally.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



142. A hypothetical monopolist imposing a small but significant and non-transitory increase in competitive pricing of buying tools for large advertisers in the United States would not cause a sufficient number of customers to switch to buying tools for large advertisers outside of the United States such that the price increase would be unprofitable. Buying tools for large advertisers in other countries that are not available in the United States offer impressions adjacent to content that is often undesirable, irrelevant, or not brand safe for advertisers located in the United States. Accordingly, buying tools for large advertisers available in other countries that are not available in the United States are not reasonable substitutes for buying tools for large advertisers available in the United States.

**4. Google Has Market Power in the Market for Buying Tools for Large Advertisers in the United States.**

143. Google has market power in the market for large advertiser buying tools.

144. DV360, formerly known as “DoubleClick Bid Manager,” displays ads across more than 90% of the Internet. *Forbes* noted that Google “is effectively a gatekeeper to the digital ecosystem with its DV360 dominating programmatic display.” The French Competition Authority found that DV360 generates the most revenue of any other buy-side software and has exhibited significant growth. Likewise, the UK’s CMA found that DV360 “is the largest DSP” and that its market share increased from 2018 to 2020. The CMA further explained that “exclusive access to YouTube provides a very significant advantage to DV360 and creates a barrier to the growth of competitors.” According to the European Commission’s Final Report, DV360 has a 30-40% market share across *all* ad-buying tools, and its share of the market for buying tools for large advertisers is higher than that.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

145. DV360 is significantly more expensive than other ad-buying tools for large advertisers, demonstrating that Google has the ability to raise prices in this market without fear of losing share to the competition.

**C. The Relevant Product Markets Exclude Advertising on Closed-Ended or “Walled Garden” Websites.**

146. Due to its nature, purpose, and audience, display advertising placement services are not interchangeable with services that place advertising on closed-ended or “walled garden” websites, such as social-media platforms that sell placements on its own properties. Google’s automated display advertising services place advertising on websites and in mobile apps owned and operated by third-party entities. Advertisers use Google’s services to access potential customers on virtually any website or mobile app.

147. The House subcommittee report issued October 6, 2020, “Investigation of Competition in Digital Markets,” recognizes that “[w]ithin display advertising, there are two separate ‘ad tech’ markets . . . : first-party and third-party. ‘First-party’ platforms refer to companies such as Facebook [now Meta], Twitter, and Snap which sell ad space on their own platforms directly to advertisers. . . . Third-party display ad tech platforms are run by intermediary vendors and facilitate the transaction between third-party advertisers . . . and third-party publishers.”

148. From the standpoint of advertisers, programmatic display advertising complements, rather than substitutes for, other forms of digital advertising, including search and social-media advertising. Digital advertising experts Ali Parmelee and Jason Linde recommend “a blended approach” that relies on both programmatic and social-media advertising to attract separate channels of online user traffic: “In other words, it should not be Google or Facebook, it

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 should be Google and Facebook.” Another major industry resource, hubspot, explained that “in  
 2 fact, Facebook Ads and Google Ads are complementary, each offering unique benefits to  
 3 marketers.” Therefore, an advertiser cannot rely solely on the placement of display advertising  
 4 on particular social-media platforms without forfeiting the ability to reach consumers who do not  
 5 use that platform. Moreover, users of those platforms may be less receptive to ads appearing at a  
 6 destination used primarily for social networking and messaging, as opposed to destinations used  
 7 by consumers to shop for goods or services.

8 149. Meta sells its supply of inventory for advertising on its owned-and-operated  
 9 social-media platforms as a first party through a self-contained and closed-ended system separate  
 10 from the ad tech stack in which MAN offers services to place web and in-app open-display ads,  
 11 and in which Google holds a monopoly as the dominant broker.

12 150. Advertising on Facebook or Instagram is not a substitute for appearing on the  
 13 wide range of other publishers’ sites accessible through programmatic display transactions. The  
 14 closed-ended advertising services offered by Meta (and by other closed-ended platforms like  
 15 Amazon, Twitter, and Snapchat) are not substitutes for the open-ended, cross-web system  
 16 Google offers and do not compete for the same business. Those other sites do not provide the  
 17 system and tools to connect advertisers to publishers—the suite of services comprising the  
 18 relevant markets here.

19 **D. The Relevant Product Markets Exclude Direct Placements.**

20 151. The markets for brokering of programmatic display ads also are distinct from the  
 21 much smaller market for unbrokered direct display-ad placement. While it is theoretically  
 22 possible for an advertiser to connect directly with a publisher to negotiate the placement of  
 23 advertisements onto the publisher’s supply of advertising space, for the vast majority of

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 advertisers doing so is impractical. Well over 90% of all online display advertising space in the  
2 United States is bought and sold on ad exchanges in the electronic real-time bidding market.  
3 Direct sales (also known as “guaranteed demand”) involve only a miniscule percentage of  
4 display-ad transactions, for only the most valuable publisher inventory, and command the highest  
5 prices.

6 152. At least thousands of companies act as publishers with display advertisement  
7 inventory but, in general, these companies neither perform nor provide services that facilitate  
8 placement of advertisements in that space. Only a few companies—Google chief among them—  
9 provide display advertising intermediary matching and transaction services.

10 153. Internet display advertising is focused on targeting individuals. Advertisers  
11 seeking to remarket to a user who previously was on their site in an effort to nudge that user to  
12 return and complete a purchase do not care where the prospective customer sees the nudging ad.  
13 Buying ads directly from a particular website would not serve this remarketing purpose.

14 154. Advertisers prefer to use intermediaries that can identify a profiled user; ad prices  
15 drop dramatically when a user cannot be identified.

16 155. Nearly all advertisers lack the financial or manpower resources and access to  
17 negotiate directly with specific publishers to place their display ads, and even advertisers with  
18 the ability to do so prefer not to limit their placement of display ads to discrete websites.  
19 Publishers and advertisers generally rely on third-party display advertising services to facilitate  
20 the placement of online display ads.

21 156. In the rare instances where select advertisers can purchase “directly from the  
22 publisher” they can do so via manual media buying, programmatic direct buying, or a private  
23 marketplace (PMP). Manual media buying is antiquated and now seldom done. Programmatic

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 direct and private auctions are the only current ways to purchase advertising directly from  
 2 publishers. Programmatic direct buying is done under very limited circumstances of either  
 3 specific invite from the publisher to participate in a private auction, or directly, without an  
 4 auction, at ultra-premium prices most advertisers cannot afford. Ads sold through programmatic  
 5 direct are typically tied to premium publishers (e.g., *Forbes*) that erect paywalls for users and  
 6 reserve a limited percentage of their display-ad inventory for which they can demand a premium  
 7 price from well-capitalized advertisers, which receive guaranteed ad space in return. Similarly,  
 8 with PMP, the participants are large enterprise advertisers and marketers, and only a handful of  
 9 large advertisers (e.g., Nike, Barclays) are invited to bid on a publisher's inventory. PMP is  
 10 typically offered only by publishers like major media sites that can offer premium, expensive  
 11 inventory.

Formatted: Font: Not Italic

Formatted: Font: Not Italic

12 157. Small and medium-sized advertisers cannot access this exclusive inventory  
 13 because they not invited to bid by the publisher, and even if they were, they could not pay the  
 14 high prices the premium publisher charges. In sum, private invite-only auctions and direct  
 15 purchasing account for a very low percentage of display advertising, and they are no substitute  
 16 for real-time bidding on the open web. Thus, direct sales do not constrain the fees Google  
 17 charges for its programmatic display-ad brokering services.

18 **E. The Relevant Product Markets Exclude Non-Digital Advertising.**

19 158. For similar reasons, brokering services for online display advertising cannot be  
 20 substituted with traditional forms of advertising, such a print, television, radio, or billboard  
 21 advertisements. None of those marketing channels relies on individual targeting based on  
 22 individual user data and profiles—the entire driver of programmatic or automated display  
 23 advertising. Recent pricing and bid data from various exchanges demonstrate that, unless they

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 can know the identity of the users being targeted, advertisers often avoid ad auctions altogether.  
2 A 2018 Google study reported that the prices for ad space trading on Google's exchange drop by  
3 half or more when advertisers cannot identify users associated with the ad space for sale.  
4 According to Index Exchange, the number of bids for ad space on Mozilla Firefox pages  
5 declined by 38% after that internet browser started blocking cookies permitting identification of  
6 users.

7 159. Digital advertising is different in kind from traditional forms of advertising,  
8 including because it reaches targeted customers individually and because digital advertisements  
9 can be continuously updated and improved based on data showing how consumers are  
10 responding. Each display ad is targeted in real time to a specific user on a particular website  
11 based on known identifiers about that user's personal characteristics, buying habits, location,  
12 wealth, likes, dislikes and so forth. Nothing similar is remotely possible with traditional forms of  
13 advertising which cannot be directed to individual consumers with anywhere near that degree of  
14 precision.

15 160. Other types of advertising also cannot provide the re-marketing capability that is  
16 unique to display advertising. Display advertising targets consumers whose internet browsing or  
17 purchase histories reflect an interest in a product, service or website, and the advertising seeks to  
18 redirect the consumer back to the advertiser's product. Non-digital advertising cannot substitute  
19 for this function.

20 161. Additionally, the relevant markets here embrace the brokering services for  
21 placement of a unique type of advertising, and other advertising channels do not serve the same  
22 purpose as these brokering services. No other type of advertising can substitute for the function  
23 of the display-ad intermediation services Google offers, which allow advertisers to reach

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

potential customers across a broad range of publication sites and mobile applications, relying on user data and algorithms to optimize the targeted placement of advertising.

**F. Programmatic Display Advertising and Search Advertising Are Economically Distinct Products.**

162. For reasons already stated, brokering services for display advertising are not reasonably interchangeable with search advertising. These two forms of digital advertising perform different roles, serve complementary purposes in marketing campaigns, and are treated by advertisers and marketing firms as distinct.

163. Search is intent-based advertising that seeks to induce consumers who have already shown an interest in buying a product or service to make a purchase. Display, in contrast, is suitable for raising awareness about a product, service, or brand and reaching new audiences that may not yet have shown an interest. Because of this basic difference in how the two forms of advertising function in relation to potential customers, they do not reasonably substitute for each other.

164. According to Google's chief economist, "[o]ne way to think about the difference between search and display/brand advertising is to say that 'search ads help satisfy demand' while 'brand advertising helps to create demand,'" and "[d]isplay and search advertising are complementary tools, not competing ones." Search and display advertising, by Google's own admission, thus do not compete for the same business but are in distinct antitrust markets.

165. Also, as noted above, display advertising performs a unique function in advertisers' re-marketing campaigns. Search advertising cannot accomplish this re-marketing given that the purpose of this strategy is to target a discrete set of potentially interested users with display advertising. Numerous class members, including Plaintiffs, relied on display

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

advertising brokered by Google to follow users around the web with re-marketing campaigns aiming to increase user “conversion” into paying customers.

## **VI. GOOGLE’S ANTICOMPETITIVE AND DECEPTIVE CONDUCT**

166. The United States Department of Justice has noted that Google has “created continuous and self-reinforcing monopolies in multiple markets.” Google’s set of anticompetitive and deceptive acts described in this Complaint were part of a unified, long-term exclusionary strategy the combined effect of which was to roll back competition, giving Google unchecked power across the ad tech stack connecting advertisers and publishers.

### **A. Google’s Acquisitions, Dominance in Search, and Control of User Data Created the Conditions for Its Monopolization and Led Most Advertisers to Use Only Its Display Advertising Services.**

64.167. Google laid the groundwork for the more recent conduct in its monopolization scheme by acquiring rival firms to avoid competition and leveraging its dominance in search advertising. Since 2007, Google has made numerous key acquisitions in the interest of taking control of the entire ad tech stack. ~~Through these acquisitions, Google absorbed~~ These acquisitions were instrumental to the first part of Google’s monopolistic scheme—to absorb competing firms to avoid competing with them with the purpose and effect of building and consolidating its monopoly.

168. Through these strategic acquisitions, Google absorbed various competing firms to eliminate competitive threats and created the market power and protective conditions that enabled its other restraints. Google’s strategy, as revealed in its internal documents produced to Congress, was to acquire a series of ad-tech competitors and combine products to foreclose competition. Google used these acquisitions to solidify its power and capitalize on what its internal documents call “the synergies/inter-relationships from owning all these pieces.”

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"



169. Senator Klobuchar stated that, “[w]ith the benefit of hindsight, it seems obvious that [Google’s] acquisitions were undertaken by the company in order to add to its market share and without explanation . . . other than for Google to establish and maintain the monopoly power it currently has.” The House subcommittee report issued October 6, 2020, “Investigation of Competition in Digital Markets,” recognizes that Google’s series of acquisitions in the relevant market “enabled it to gain a controlling position across an entire supply chain or ecosystem. Google’s acquisitions of DoubleClick, AdMeld, and AdMob . . . let Google achieve a commanding position across the digital ad tech market.”

170. Documents that Google produced to Congress show that Google acquired companies to absorb its competition and combine products along the ad stack instead of competing on the merits. An internal Google presentation from July 2006 included a slide titled “Build a Self-Reinforcing Online Ads Ecosystem,” which noted in part that acquiring DoubleClick or Atlas could create “self-reinforcing benefits” for Google’s integrated ad business.

~~65-171.~~ In 2007, Google purchased the leading ad server, DoubleClick, which provided the basic technology for Google’s current PAS, and in 2010, Google acquired InviteMedia. In 2009, Google acquired AdMob, the largest ad server for the then-nascent mobile application market, which has since grown exponentially. The technology from Invite Media, which Google acquired in 2010, was re-launched in 2012 as DoubleClick Bid Manager and eventually Google converted the technology from InviteMedia into Google’s main DSP, Display & Video 360. In 2011, Google purchased AdMeld, one of the largest SSPs in the display advertising industry, which it integrated into AdX, Google’s existing exchange. And in 2014, Google bought Adometry, an analytics and attribution provider it then integrated into

58

~~FIRST AMENDED CONSOLIDATED CLASS ACTION COMPLAINT  
CASE NO. 5:20-cv-03556-BLF~~

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

Google Analytics. Together, these acquisitions reveal a business objective of occupying the entire ad stack and the connected analytics market through buying up the competition.

~~66. When Google purchased DoubleClick, the Federal Trade Commission accepted Google's representations that it would not leverage its control of publishers' primary ad server to distort competition in the electronic ad trading market. Google promised to manage the conflicts of interest, including from enhanced access to user data, that would result from the acquisition. Google's general counsel assured Congress that DoubleClick "data is owned by the customers, publishers and advertisers, and DoubleClick or Google cannot do anything with it."~~

~~67. FTC Commissioner Pamela Jones Harbour dissented from the FTC's approval of the acquisition, warning in part that if Google and DoubleClick were permitted to merge without conditions, the new combination could merge Google and DoubleClick data to the detriment of consumer privacy and competition. Commissioner Harbour stated that the merger could "profoundly alter the 21st century Internet-based economy—in ways we can imagine, and in ways we cannot." She expressed concern about "the privacy interests of consumers" and wrote that she was "uncomfortable accepting the merging parties' nonbinding representations at face value."~~

~~68. In approving Google's acquisition of DoubleClick, the FTC rejected prescient concerns about data and competition raised by Commissioner Harbour and public interest groups. An April 14, 2007 news article in the *New York Times* noted that Google's DoubleClick division would have conflicts of interest with Google's exchange, but suggested publishers and advertisers might simply "jump ship" if Google leveraged the acquisition "to further its own ad network."~~

~~69. When Google did leverage the DoubleClick acquisition to further its ad network, instead of turning to other ad tech providers, increasing numbers of publishers and advertisers concluded they had no choice but to rely on Google to broker display ad placement.~~

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

70. — In 2009, Google restricted the ability of publishers and advertisers participating in its exchange to access their DoubleClick data, reserving an essential information advantage for its own trading divisions.

71. — In 2016, moreover, Google broke a key promise it made to the FTC to push through the DoubleClick acquisition: Google began merging DoubleClick web browsing data with personal information collected through other Google services, combining information linked to a user's personal identity with their location on Google Maps, information from their Gmail records, and their Google search histories, along with user information obtained from other Google products. With this step, Google eliminated the barrier between the data that Google gathered from cookies tracking users' online behavior and the personal information Google held from its users' accounts. Its digital advertising monopolies enabled Google to make this momentous shift in data policy without risk of losing business to rivals more protective of consumer privacy.

72. — In approving Google's 2010 acquisition of AdMob, the leading mobile ad network at the time, the FTC acknowledged that "the combination of the two leading mobile advertising networks raised serious antitrust issues." Yet the FTC deemed those concerns "overshadowed by recent developments in the market," in particular a move by Apple to "launch its own, competing mobile ad network." The FTC approved Google's acquisition of AdMob based on the assumption that Apple would continue to build its presence in the mobile ad market. But that assumption was incorrect — Apple's product failed to gain traction and in 2016 Apple abandoned its attempt to develop a competing mobile ad network.

73. 172. By 2015, Google's acquisitions had given it monopoly power in the display advertising services market, and By 2015, the early exchanges that had initially outperformed Google were selling at a discount price or had folded. The market shares of the DSPs that once led that market segment declined in parallel.

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

173. Documents that Google produced to the House Subcommittee on Antitrust, Commercial, and Administrative Law show that Google acquired companies to absorb its competition and combine products along the ad stack instead of competing on the merits. After acquiring potential rivals, Google consolidated its monopoly across the ad tech stack through a series of product mergers whereby it bundled two distinct products together and rebranded the integrated entity as a single product. Google blurred the distinction between its ad server and exchange by reclassifying its ad-serving revenues in its shareholder reports and by merging the two into a single new product that it named Google Ad Manager. Such mergers increased switching costs for advertisers—and barriers to entry for competitors—for services that already carried high switching costs.

74. An internal Google presentation from July 2006 included a slide titled “Build a Self-Reinforcing Online Ads Ecosystem,” which noted in part that acquiring DoubleClick or Atlas could create “self-reinforcing benefits” for Google’s integrated ad business. The slide asked, “[H]s there some framework we have to demonstrate the synergies/inter-relationships from owning all these pieces?”

75-174. In an internal email from 2010, discussing Google’s potential development of a demand-side platform for advertising agencies (a “bidder”), the executive in charge of Google’s display business wrote: “The primary benefits on having a bidder are eliminating the disintermediation risk and substantially increasing display spend with Google from agencies (through the combined use of DFA – bidder – AdX). . . . We are looking at options to accelerate this (potentially through M&A for example).”

76-175. DFA refers to Google’s ad server; AdX was Google’s exchange. The “disintermediation risk” that Google sought to eliminate resulted from the competitive,

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

transparent conditions in the display advertising exchange market at the time, which diverted ad money away from Google. Thus, Google's plan was to *combine* products to increase its revenue from "display spend" and lock in bidders to its new and consolidated intermediation services.

~~77. Google's merge to monopolize strategy worked. On the supply side, Google now holds at least 90% of the PAS submarket through multiple products such as Google Ad Manager and Google DoubleClick for Publishers. Since taking the dominant position in the PAS submarket, Google began merging~~achieved ~~its supply-side intermediation products with its PAS offering. The composite product "Google Ad Manager" combined Google's PAS with its associated ad exchange. For the SSP and associated ad exchange submarket, Google holds a 50-60% share. On the demand side, Google also controls a substantial majority of the DSP submarket. Google has a 55% market share of the ad exchange submarket, far more than the second-place company, AppNexus, which has a 11% share of that submarket. And Google's DSP holds a 50% share of the DSP submarket, with AOL a distant second at 12%. Google holds an 80-90% share of the AAS submarket as well.~~

~~78.~~176. stated goal of gaining dominance by "eliminating the disintegration risk" ~~from competing firms.~~ Because of Google's market dominance, publishers and advertisers now have little choice but to use Google's intermediation services. Nexstar Media Group, Inc., the nation's largest local news company, tested what would happen if it stopped using Google's technology to place ads on its websites. Over just a few days, the company's ~~video~~-ad sales plummeted.

~~79. Google further consolidated its monopoly across the ad tech stack through a series~~is the dominant provider ~~of product mergers, whereby it bundled two distinct products together and rebranded the integrated entity as a single product. Google blurred the distinction between its ad server and exchange by reclassifying its ad serving revenues in its shareholder reports and by merging the two into a single new product that it named Google Ad Manager.~~

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ...  
+ Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

Google then merged its AAS with its DSP to create Display & Video 360. Each of these mergers increased switching costs for advertisers and barriers to entry for competitors for services that already carried high switching costs.

**C. Google Used Its Market Power to Acquire and Maintain a Monopoly for Display Advertising Services**

**1. Google Leveraged Its Dominance in Search and Search Advertising and Its Control of User Data to Gain a Monopoly in Brokering Display Advertising**

80. Google operates the default internet online search platform and search advertising in the United States. More than 90% approximately 95% of all internet searches are conducted through Google Search. Further, Google's web browser, Google Chrome, occupies about half of the U.S. browser market.

81. Google has long monetized its monopoly in search by selling search advertising digital ads responsive to user searches. The data that Google has acquired from search and Google Chrome users allowed Google to leverage its monopoly in the digital search market into the related but separate market of display advertising.

82. General online search services in the United States constitutes a distinct antitrust market. Search services allow consumers to find responsive information on the internet by entering keyword queries into search engines such as Google. These general search services are unique because they offer consumers access to an extremely large and diverse volume of information from many sources across the internet.

83. There are no reasonable substitutes for general online search services. Other search tools, platforms, and information sources are not reasonably interchangeable with general online search services because they do not provide access to a wide range of information from one search inquiry. Few consumers would find alternative sources a suitable substitute for general search services.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

84. Google has monopoly power in the United States general online search services market. Google dominates this market with an approximately 90% market share. And nearly 95% of all search queries on mobile devices are performed using Google's search engine.

85. There are significant barriers to entering the market for general online search services, including large capital investment, highly complex technology, access to effective distribution, and adequate scale.

86. Google's anticompetitive conduct has effectively eliminated rivals' Google took advantage of its monopoly in search and search advertising to hoard key data for targeting users related to individual preferences, characteristics, and the performance of ads. The prices that an online advertiser is willing to pay depend on two crucial factors: the ability to compete in the general search services market. Google used exclusionary agreements, tying arrangements, and payoffs to barricade its general search monopoly such that competitors are denied vital distribution, scale, and product recognition—preventing them from realistically challenging Google in this market. As one example, Google ensured that its search engine would identify who is loading the page or mobile application on which the ad may be the preset default general search engine on hugely popular devices like Apple's iPhone and the devices running on Google's Android operating system.

87. Online search advertising in the United States also constitutes a distinct antitrust market. Search advertising enables advertisers to target their ads in real time in response to search queries.

88. Other forms of advertising are not reasonably interchangeable with online search advertising. The capability of search advertising to respond to consumers' inquiries at the moment they are looking for information to make a potential purchase makes these ads highly valuable to advertisers and distinguishes them from other types of advertising that cannot be targeted in this way, whether online or offline. Display advertising is no substitute for search advertising, including because display advertising is not responsive to a consumer's specific

Formatted: Pattern: Clear (White)

Formatted: Pattern: Clear (White)

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

inquiry and is further removed from the point of purchase. Few advertisers would find alternative sources a suitable substitute for search advertising.

89. Google has monopoly power in the United States online search advertising market. Google holds displayed, and the ability to connect that user's identity with more than a 70% share of that market.

90. Barriers to entry in the search advertising market, among other factors, protect Google's monopoly in that market. Most critically, search advertising requires a search engine with sufficient scale to make the advertising profitable. Hence the same entry barriers that fortify Google's general search services monopoly also protect Google's search advertising monopoly.

91. Google's monopolies in search and search advertising and the data they generate about individual users give Google an enormous advantage over online advertisers and publishers owing to the sheer volume of information Google acquires about consumers through its integrated panoply of products and services. This data include browsing histories from Google Search and Google's Chrome web browser, and location data from Google Maps, Waze, and Google's Android operating system embedded in hundreds of millions of smartphones. As Google's former CEO Eric Schmidt boasted, "We know where you are. We know where you've been. We can more or less know what you've been thinking about."

92.177. Online information about them. Google understands that online advertising is more effective when it is targeted, displaying products or services a user is more likely to want. Accordingly, user data So the user data Google has acquired from its search and search advertising monopolies—including gender, age, location, and browsing history— influence not just the types of ads a user will see, but also the prices advertisers are willing to pay. "The exact same ad, on the same website, at the same time, could be worth vastly different amounts to two different buyers depending on how much they know about the consumer being

Formatted: Pattern: Clear (White)

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



targeted,” explained Ari Paparo, a former Google executive who founded the advertising company Beeswax. “User data is everything.”

~~93. The prices that any company is able to fetch for ads that it displays online depend on two crucial factors: the ability to identify who is loading the page or mobile application, and the ability to connect that user’s identity with more information about them.~~

94.178. The targeting of display ads begins the moment a user clicks to visit a web page. Typically, the user’s IP address and location, along with the URL of the web page, are swiped from the user’s browser without their explicit knowledge. This data then informs the instantaneous ad auctions that occur in the split second before the web page appears to the user. The goal is to build and deploy as specific a portrait about the user as possible, primarily by linking their device with their identity. Web cookies, tags, and “fingerprinting” of mobile devices are common tools for doing so.

~~95.179. If a publisher or company that sells online ads can know what a user is viewing on other sites, the publisher can target the user based on that information when the user returns to the publisher’s site.~~ Because of its dominance, including in search, Google can track users’ visits to at least 70% of the top one million sites on the internet. ~~Google has~~Google’s tags (including as a third party) ~~tracking are used to track~~ user behavior on over 80% of popular websites.

~~96. Due to Google’s monopoly in search and its unrivalled ability to gather, aggregate, and analyze user data, which it does not share, no potential competitor to Google can offer an advertising product that comes close to the individualized targeting that Google can offer. Without access to search data, potential rivals are effectively excluded from competing in digital advertising.~~

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

180. Further, because search advertising targets users who have already shown some interest in the product or service from their search, few online advertising campaigns bypass online search as a platform for marketing. Search advertising accounts for at least part of the ad spend of nearly every advertiser engaged in online advertising.

181. When an advertiser establishes a Google Ads account to use in placing search advertisements, Google Ads is set as the default account for placing both search and display advertisements. Moreover, Google restricts access to data relating to web searches performed on Google Search from advertisers using rival service providers. As a result, an advertiser running both search and display ads cannot track the performance of its search ads, and cannot optimize its search or display-ad campaign, unless it relies only on Google to place its display ads. Nor does Google allow small advertisers to export data needed to switch from Google Ads to another ad-buying tool, including information about the consumers reached by their search and display advertising campaigns. Google prevents advertisers who attempt to use another display-ad provider from accessing or exporting such data as which users have been targeted, which users have made purchases, and which users ideally should see more ads. Advertisers cannot combine such information with internal or third-party data to set or adjust display advertising strategy unless they use only Google to broker their digital ads. These restrictions prevent advertisers from switching away from Google Ads—to access the search and other data over which Google has monopoly control and which is key to effective display advertising, an advertiser is coerced into using Google's products in the separate market for display advertising services.

182. Google's Ads Data Hub (ADH) allows an advertiser who accepts these restrictions to view the data from its search ad campaign that shows which customers clicked on Google Search ads and to combine it with other data, such as third-party data audience metrics or

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

internal company data about existing customers. After determining a display advertising strategy using that combined data, the advertiser can export the necessary information—but only to a Google display-ad product. In other words, the only way to export information from ADH is to send it to another service owned by Google.

183. In order to display a specific, targeted ad to a particular user, the ad server assigns a unique user ID to each web user, which allows the publisher, the ad exchange, and the advertiser to know characteristics of that user. An advertiser can link the ID to a specific identity and certain characteristics about the user such as where he or she lives and what products he or she have purchased. The user ID allows the advertiser to target a specific ad to the online space that the individual user is viewing. It also allows the advertiser to track whether the user clicks on an ad or purchases a product and allows the advertiser to cap the number of times a user is shown a particular ad.

184. After acquiring DoubleClick, Google began hashing or encrypting user IDs for each publisher using Google's ad server, as well as for each advertiser bidding through Google's ad-buying tools. Consequently, advertisers using non-Google exchanges and ad-buying tools cannot access these encrypted user IDs. They cannot know the identity of a user associated with a publisher's impressions, know if they are bidding on valuable impressions, cap the frequency at which any given user is shown the same ads, or target specific audiences.

185. Because Google obscures DoubleClick IDs for all parties other than Google, advertisers that use more than one buying tool at a time risk inadvertently bidding against themselves in exchange transactions, driving up the price they would pay. And in 2018, Google also stopped allowing advertisers to access the encrypted user IDs from ad campaign reports. Advertisers need this information to hire non-Google ad campaign measurement firms.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

Advertisers that stay within Google's services exclusively and use its ADH product can still access these IDs.

186. Google's leveraging of its search and other data restrains competition with an enhanced effect because advertisers almost always use a single DSP for a given advertising campaign. Advertisers use a single DSP for a campaign largely because doing so allows them to manage frequency caps (limits on the number of times the same user is shown an ad) during the campaign and facilitates audience management and reporting. Thus, an advertiser cannot advertise on YouTube, Google Search, and other publisher websites without experiencing significant costs and inefficiencies from using a different advertising service provider to broker distribution of the ad campaign into each forum.

97-187. To illustrate Google's vast advantage over any other publisher in accessing and monetizing data, consider two hypothetical online publishers, CNBC and the *New York Times*. Suppose, for example, that a user named Mary visits CNBC's website in the mornings, where she reads about financial markets, and visits the *New York Times* in the evenings to read the book review section. CNBC knows that Mary follows financial markets and might monetize her view at a \$30 CPM (cost per thousand impressions). The *Times* knows that Mary likes to read books and might only monetize her at a \$10 CPM. If the *Times* can somehow find out that Mary is reading CNBC in the mornings, then when Mary visits the *Times* book review section in the evening, the *Times* can target her as someone who follows the markets and monetize her at \$30, too.

98-188. Since the two are competitors in the supply side of the display advertising market, CNBC would not want to share with the *Times* what Mary reads on cnbc.com. If CNBC is selling ads to its audience of financial readers at a \$30 CPM, and the *Times* can access

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

CNBC's readers and their reading patterns, then the *Times* could undercut CNBC and sell ads targeted to CNBC financial readers for, say, \$25 instead of \$30.

~~99,189.~~ Google uses its ability to track users across the web to extract such a large advantage in display advertising markets that rivals are effectively excluded. Google tracks users through its analytics and ad-serving products, which it combined and rebranded as the Google Marketing Platform. While publishers like CNBC and the *Times* would never share with each other user information that gave each a competitive advantage, they have no choice but to share user tracking information with Google, which acts as both their ad broker and supply-side competitor. This not only affects the publishers, who need to compete with Google for ad supply, but also advertisers, who depend on the same user data, but on the buyer-side of the transaction. With more information than the other publishers bidding on an advertisement, and with control of the auction process, Google can ensure that advertisers pay supra-competitive prices while publishers are paid as little as possible and Google takes a large cut of any deal.

~~100,190.~~ Google's exclusive access to its proprietary data from its own widely used products and services like Chrome, Gmail, Maps, and Android, which further widens its substantial advantage over other ~~publishers~~ programmatic display advertising services. Google relies on this data, which is generally unavailable to competing bidders, when bidding on its own ad exchanges to win contracts to display ads. Potential rivals for programmatic display advertising contracts cannot compete to win business without access to this data.

191. As Senator Hawley told Google's witness, "you're using your position in search and YouTube in order to give yourselves a dominant position in the ad stack . . . [T]he concern is, is that you control YouTube and search, which are the dominant platforms; you control massive amounts of consumer data that you have harvested from your other consumer-facing

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

platforms—Gmail, Google Maps, G-Suite, etcetera. You then use those advantages in the ad stack at every single layer, every layer of which you exercise dominance in. . . . This looks like monopoly upon monopoly, in a classic case of tying.” Furthermore, while digital

101.192. Digital ads trade on several auction markets, but Google ensures that its own display advertising inventory can only be purchased through its proprietary auctions.

ThusAs a result, the most effective, data-driven inventory stays within Google’s control and potential competitors are excluded.

193. Google also conceals key data to stifle competition with its display advertising systems. For instance, Google does not disclose its take rate, removes time-stamp information on bids, and conceals information about the performance of the digital ads it brokers, such as how many impressions are shown to actual users, as opposed to bots. Google’s multiple failures of transparency reinforce its dominance of the display-ad market, deprive advertisers of bargaining power, and deter potential rivals from attempting to enter and compete in the relevant markets.

194. When acting as an intermediary, Google conceals from publishers and advertisers the price actually paid to Google for an ad placement. Even so, the consensus among knowledgeable publishers and advertisers is that Google’s “ad tech tax” is high, particularly in comparison to fees charged in non-programmatic ad markets. Non-transparent pricing enables Google to engage in arbitrage out of view, and to increase its monopoly rents. In a competitive market Google’s withholding of fee-related information would risk its losing business to more transparent rivals because the information withheld would allow advertiser customers to compare competing advertising choices and make optimal choices about how to bid for advertising inventory. A market participant observed in congressional testimony that “Google could make

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

the process ‘more transparent,’ but given Google’s financial stake in maintaining secrecy, ‘there is no incentive to do so.’”

195. Although Google redacts its take rate from trading or auction records on both the buy-side and the sell-side, service providers in competitive markets generally must furnish their customers detailed accounts of the services they are providing to justify the prices they charge. Studies have shown that about 15% of display advertising transaction costs are unaccounted for—these form a portion of Google’s monopoly rents. In surveys conducted by Association of National Advertisers estimating take rates, participants reported it was impossible or very difficult to obtain transaction-level pricing data related to Google’s brokering services.

196. Google also removes time-stamp information on bids, which publishers previously had used to optimize their pricing. Moreover, Google conceals information about the performance of the digital ads it brokers, such as how many impressions are shown to actual users, as opposed to bots. Google’s multiple failures of transparency reinforce its power in the display-ad market and prevent advertisers from knowing if they are wasting their money.

197. In sum, Google controls the advertising auction process and controls all of the data that allows participants in this process to participate effectively. As a result of Google’s data hoarding, if an advertiser were to attempt to run a display campaign other than through Google, it would blind itself to whether its ads are reaching the right consumers in the right places at the right time. The U.K. CMA’s 2020 report notes that Google “has been able to leverage the market power from its owned-and-operated advertising inventory into the open display market and within the ad tech stack, making it harder for third-party intermediaries to compete,” and that “greater competition and transparency would put downward pressure on” fees borne by advertisers and publishers.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

198. Google's conduct and internal messaging also reflect its executives' awareness that Google has used its monopoly power to restrain competition in these interlocking markets. As DOJ noted, "Google employees were instructed to avoid using terms such as 'bundle,' 'tie,' 'crush,' 'kill,' 'hurt,' or 'block' competition, and to avoid observing that Google has 'market power' in any market."

**B. Google's Scheme to Monopolize Injured Advertisers Through Various Auction-Rigging Devices and Anticompetitive Restrictions.**

199. In its September 13, 2022 Opinion & Order, the Court identified categories of anticompetitive conduct that harm the class of advertisers on whose behalf this Complaint is brought. While the preceding section provides background on how advertisers have been coerced to place display ads using only Google's services, this section sets out the particular anticompetitive or deceptive acts and processes carried out by Google in furtherance of its monopolization that directly injured advertisers.

200. Google's conduct that destroyed competition and misled market participants has harmed both small and large advertisers. In a competitive market, advertisers would benefit from ad-buying tools competing on price and quality (e.g., the extent to which the tools maximize advertisers' best interests). Google's exclusionary conduct set out below has enabled it to charge supra-competitive fees, decrease quality below competitive levels, and decrease output in the three markets relevant to this Complaint.

**1. Dynamic Allocation Harmed Competition in the Ad Exchange Market and Injured Advertisers.**

201. Google foreclosed competition in the market for exchanges with a program introduced in 2010 called "Dynamic Allocation." Dynamic Allocation was a setting available to publishers that allowed AdX to view historical bid data from rival exchanges. With Dynamic

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



Allocation enabled, Google only needed only to beat the historical average bid price from competing exchanges (e.g., by \$.01) rather than compete against the real-time bid for a given auction. With Dynamic Allocation, Google's DFP ad server terminated impartial exchange order routing and gave Google's AdX exchange a first right of refusal at depressed prices, allowing Google to maintain and profit from its monopoly in the ad exchange market.

202. The adoption of Dynamic Allocation followed certain changes in how publisher ad servers placed bids on ad exchanges. Before 2009, a publisher using Google's DFP ad server would rank in order which ad exchanges would be permitted to bid on an available impression—a process known as the “waterfall.”

203. Google's DFP ad server would offer impressions on exchanges in the order selected by the publisher, meaning that if a higher-ranked exchange did not sell the impression (i.e., meet the publisher's reserve price), the ad server would move sequentially to the next exchange on the publisher's list until the impression was sold.

204. This system of allocation of publisher's inventory across multiple exchanges did not favor one exchange over another. Once a publisher established the sequence for the relevant exchanges, Google's ad server faithfully carried out those instructions. If an exchange performed well for a publisher (e.g., because it attracted advertisers willing to bid top dollar for impressions on that publisher's site, or because the publisher wanted to be associated with advertisers on that exchange), then the publisher would have an incentive to reward that exchange with a higher place in the publisher's waterfall. Conversely, if an exchange's bid prices or quality performance failed to justify its place in the waterfall, the publisher would have an incentive to demote that exchange. Publishers benefited from exchanges competing over time to earn their place in each waterfall.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

205. Because non-Google exchanges often outperformed AdX on price, many publishers ranked those exchanges higher and treated AdX as a lower-priority exchange option to fill impressions not otherwise purchased by a higher-performing exchange. This meant that AdX did not have the opportunity to return bids for many publisher impressions.

206. In 2010, Google applied a new decisioning logic to DFP: a program it called Dynamic Allocation. Dynamic Allocation marked an end to DFP ad server order-routing impartiality. Under this program, Google used its DFP ad server dominance to impart a substantial new unearned and anticompetitive advantage to its own AdX exchange: a right of first refusal. Once a would-be winning buyer emerged through the waterfall system, Dynamic Allocation gave AdX an opportunity to win that impression if it could beat the otherwise-winning exchange's advertiser's price by \$0.01. Google's AdX was the only exchange with such a backdoor right of first refusal on publishers' inventory in DFP; Dynamic Allocation gave this right of first refusal only to AdX.

207. Dynamic Allocation foreclosed competition and exacerbated problems of adverse selection in the exchange market, permitting Google's AdX exchange to transact a large number of publishers' impressions—and the highest value impressions—at higher prices than those impressions would have traded at, absent Dynamic Allocation. Competing exchanges were left with lower-quality ad impressions passed on by AdX and deprived of liquidity. Despite entering a competitive market just a few years earlier, Dynamic Allocation propelled Google's AdX exchange to the top of the market by 2013.

208. Dynamic Allocation limited advertisers' ability to effectively use competing exchanges and ad servers, and drove up the overall costs of impressions borne by advertisers.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

**2. Enhanced Dynamic Allocation Harmed Competition in the Ad Exchange Market and Injured Advertisers.**

209. Through a program introduced in 2014 that it called Enhanced Dynamic Allocation (“EDA”), Google devised a new way to use its ad serving monopoly to further repress competition in the exchange market. EDA drove up the prices of the most valuable impressions, causing advertisers to pay anticompetitive overcharges.

210. Like Dynamic Allocation, EDA was a new decisioning logic that Google applied to DFP. EDA had the purpose and effect of funneling an additional pool of publishers’ inventory to AdX, and that new pool contained publishers’ most high-value impressions (e.g., impressions displayed in the most prominent positions of a webpage, impressions targeted to users likely to make a purchase, etc.).

211. EDA brought guaranteed demand into the process. Guaranteed demand refers to high-value impressions for which publishers and advertisers negotiate directly. Google’s EDA algorithms relied on average sales figures for these high-value impressions to make them available for sale through AdX at higher prices without putting publishers at risk of underdelivering their promised, guaranteed sales to the buyers who previously negotiated the guaranteed demand. Absent EDA, guaranteed impressions would have sold at prices lower than the prices they command through EDA.

212. Today, publishers have no choice but to leave EDA turned on in DFP; if a publisher turns off EDA, then AdX will not return live, competitive bids for their impressions.

213. Like Dynamic Allocation, EDA operated to cement Google’s monopoly position in the ad exchange market and injured advertisers in the process. EDA further limited

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

advertisers' ability to use competing exchanges and competing ad servers successfully, while driving up the costs of the most valuable impressions.

### **3. Project Bernanke Harmed Competition in the Market for Small Advertisers and Injured Advertisers.**

214. In 2013, the employees of Google's gTrade group devised and launched a secret program, which they codenamed "Project Bernanke." Project Bernanke deceives publishers and advertisers and excludes competition in the exchange market and the market for buying tools for small advertisers.

215. Between 2010 and September 2019, Google publicly represented that AdX was a second-price auction. For example, shortly after launching its AdX exchange in 2009, Google executive Scott Spencer stated in an interview that "AdX is a second price auction with minimum CPMs set by the publisher. This is the most efficient auction model, resulting in the most stable, long-term equilibrium price." In their 2014 paper "Yield Optimization of Display Advertising with Ad Exchange" (published in the *American Economic Review*), Google senior researchers Jon Feldman, Vahab Mirrokni, and S. Muthukrishnan similarly promoted AdX: "With multiple bidders, AdX runs a sealed bid second-price auction." Thus, in making bids and asks related to display-ad inventory, advertisers and publishers relied on Google's representation that when AdX ran an auction, the highest bidder would win and would pay the amount of the second-highest bid.

216. A general view of what an advertiser might see in a second-price auction is as follows: in the milliseconds after an ad impression becomes available, eligible bidders can respond to a "bid request" (which they had just received via an exchange) by returning a "bid response"; when they do this, they do not know the amount of any other bidders' bids—they

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

submit what economists call a “sealed bid.” If the two highest bids come in at \$10 and \$7, the advertiser with the \$10 bid wins but pays only \$7.

217. An additional characteristic of many types of auctions is a seller’s ability to set a “price floor,” i.e., the minimum amount the seller will accept to complete a sale. Price floors are commonly employed by publishers that sell programmatic display-ad inventory in exchanges. A publisher using DFP could seek to optimize its yield by setting different price floors for different exchanges. In a second-price auction, if only the highest bid exceeds the floor (with the second-highest bid falling below the floor), then the floor will serve as the second-highest bid, such that the winner will pay an amount equal to the floor. Continuing from the example above (where the two highest bids are \$10 and \$7), if the applicable floor price is \$8, then the advertiser who bid \$10 will win—but it will pay \$8 (the floor) instead of \$7 (the second-highest bid).

218. Google’s secret Bernanke program surreptitiously switched AdX from a second-price auction to a third-price auction, from the publishers’ standpoint, on billions of impressions per month. Under Project Bernanke, the advertiser with the winning bid paid the price of the second-highest bid—but AdX also dropped or disregarded the second-place bid such that the publisher received a payout equal to the *third*-highest bid or the publisher’s floor, with Google pocketing the difference. Thus, advertisers paid Google—not publishers—an artificially inflated take rate, and in fact were paying more than the publisher would have been willing to accept.

219. Google moved the difference it retained as a result of this practice to a separate “pool,” which it then used to inflate the bids of advertisers bidding through Google Ads to win more impressions for AdX that otherwise would have gone to advertisers bidding through non-Google buying tools. Google Ads won these auctions on AdX because Google could access bid

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

information through its monopoly publisher ad server, and then inflate an advertiser's bid by drawing from funds that Google had secretly pooled from its Bernanke skimming practice.

220. Google invented Bernanke after observing Google Ads lose in AdX to competing buyers. According to Google, prior to Bernanke, advertisers bidding through non-Google buying tools were winning too often over advertisers bidding through Google Ads. An internal Google document from 2014 further states that the gTrade team was founded in late 2012 to devise "novel trading strategies" to increase Google's "win rate on AdX by +20 percent, reversing a worrisome 2013 trend" of non-Google buyers winning on AdX at Google's expense. Google's initial intent with Bernanke was to reverse this trend. But as the secret program continued to evolve, it morphed into a device to artificially boost the number of impressions transacted in AdX—a shift that necessarily came at the expense of competing exchanges and left advertisers with fewer alternatives to AdX. The Bernanke-inflated bids increased the number of impressions transacted in AdX and permitted AdX to trade publishers' most valuable impressions while leaving mainly low-value impressions for rival exchanges.

221. Google developed three different versions of Bernanke, each of which varied how the program accumulated money in a Bernanke pool and spent those funds to inflate the bids of Google Ads advertisers. In each version, publishers were unwittingly paid amounts that reflected third-place bids rather than second-place bids while Google Ads continued to charge the winning advertiser as if it had won a second-price auction.

222. The first version of Bernanke designated the pool funds on a per-publisher basis, meaning that the funds retained by Bernanke were distributed in the form of inflated bids to the same publisher.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

223. The second version of Bernanke, launched in May 2015 and called “Global Bernanke,” created a “global” pool of funds that Google used to inflate Google Ads bids that fell below a publisher’s floor price to drive more transactions to AdX. In other words, Global Bernanke dropped the second highest bids *across* publishers’ auctions, pooled the resulting money extracted, then spent that money to inflate only the bids belonging to Google Ads advertisers who likely would have lost bids, resulting in non-AdX exchanges transacting impressions, because the bids were too close to the price floor a publisher set for AdX. Google applied Global Bernanke not only to the floors that publishers set in DFP but also to the floors Google set for itself by peeking at rivals’ bids, e.g., through Dynamic Allocation and Enhanced Dynamic Allocation.

224. The third version of Bernanke, dubbed “Bell,” penalized publishers that did not give AdX preferential access to their inventory through Dynamic Allocation. If a publisher did not enable Dynamic Allocation, Bell diverted advertisers’ funds away from that publisher and use the funds to inflate Google Ads bids for other publishers’ inventory.

225. Google never disclosed any iteration of Bernanke. In all three variants, Google secretly diverted advertisers’ funds to increase the win rate and volume of impressions delivered in AdX. All three variants allowed Google to cherry-pick more valuable impressions by inflating the bid price on high-quality impressions and leaving unwanted or low-value impressions for competing platforms, thereby impeding competition among the exchanges.

226. Bernanke harmed advertisers by causing them to pay the price of the actual second-highest bid instead of the third-highest bid, which was the bid that Google falsely reported as the second highest and paid to publishers (after extracting its supra-competitive fee). Bernanke also harmed advertisers by manipulating and inflating their bids. The small advertiser

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

bidding through Google Ads wants their bids routed in a way that maximizes their return on investment. For instance, a local doctor might want her ads displayed on sites that are likely to lead to new patients by reaching a relevant audience (e.g., on medical websites). Bernanke could route the doctor's bids to less relevant sites and audiences (e.g., on sports websites), merely so AdX would prevail over other exchanges for the impression. In this way, Bernanke increased the cost of advertisers' campaign and lowered their return on investment.

227. Bernanke further harmed advertisers who used buying tools other than Google Ads by rendering those tools less effective on AdX.

228. Bernanke suppressed competition in the markets for ad exchanges and for ad-buying tools for small advertisers. As described above, Google successfully used Bernanke to manipulate ad auctions to give an unfair advantage to its own ad-buying tool, Google Ads. Rival ad-buying tools and exchanges could not effectively compete with Bernanke in place. The secret program thwarted advertisers' ability to use competing ad-buying tools effectively, reduced advertisers' options, wedded them to Google, and drove up their costs associated with Google Ads and AdX.

#### **4. Dynamic Revenue Share (DRS) Harmed Competition in the Ad Exchange Market and Injured Advertisers.**

229. In 2014, Google's gTrade group launched another program, codenamed Dynamic Revenue Share or DRS, that deceived advertisers and publishers and unlawfully foreclosed competition in the exchange market. As originally constructed, DRS dynamically adjusted Google's exchange fee on an impression-per-impression basis *after* soliciting bids in the auction to let Google's AdX exchange win impressions it would have otherwise lost.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

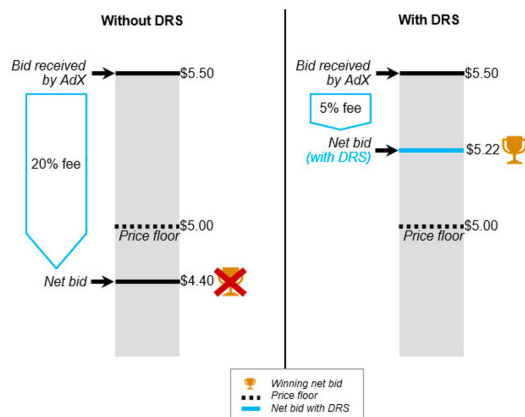


230. If Google were operating a true second-price auction, AdX could only transact an impression where a bid cleared a publisher's pre-set floor *after* accounting for Google's exchange fee ("net bid"). For example, suppose a publisher set the floor for AdX to \$10 for all bidders to improve inventory yield. Suppose the highest bid returned by an advertiser was \$12. The advertiser bidding \$12 could win if its net bid of \$12 minus Google's exchange fee of approximately 20 percent, i.e., approximately \$9.60, exceeded the price floor. Because a net bid of approximately \$9.60 is lower than the publisher's \$10 exchange floor, AdX could not transact the impression. The same advertiser would win the bid through an exchange charging a lower fee.

231. DRS manipulated Google's exchange fee *after* soliciting bids in the auction and *after* peeking at rival exchanges' bids to win impressions that Google otherwise would have lost. For example, with Dynamic Allocation, Google Ad Manager sent AdX a floor reflecting a rival exchange's historic average bid (e.g., \$5). If AdX received bids of \$4 and \$5.50, DRS could lower Google's exchange fee on the top bid to 5 percent, to produce a net bid of approximately \$5.22 (\$5.50 minus a 5 percent fee); assuming Google took a 20 percent fee, the net bid would have been \$4.40 (\$5.50 multiplied by 0.8). The manipulated net bid of approximately \$5.22 becomes *higher* than the floor so AdX transacts the impression it would have otherwise lost.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



232. In addition to lowering Google's exchange fee, DRS also secretly increased AdX's fee to well above 20 percent on impressions when one buyer bid significantly above the floor. On these impressions, advertisers paid an artificially inflated price to increase Google's take rate.

233. Dynamic Revenue Sharing thwarted advertisers' ability to use competing ad-buying tools effectively, reduced advertisers' options, wedded them to Google, and ultimately drove up their charges paid to Google. Dynamic Revenue Sharing further harmed advertisers because those that bid high above the floor should have paid the exchange floor determined at the auction's onset, not a higher floor that Google manipulated after the fact.

234. Advertisers overpaid as a result of Google's manipulation of publishers' price floors and were misled into believing that AdX functioned as a second-price auction, when in truth Google manipulated publishers' ad floors after the fact. Google internally acknowledged that DRS made its auction untruthful: "One known issue with the current DRS is that it makes

the auction untruthful as we determine the AdX revshare after seeing buyers' bids and use winner's bid to price itself (first-pricing)."

235. Google concealed DRS from both advertisers and publishers. Google started opting publishers into DRS starting in 2014 without disclosing anything about the program. By the fall of 2015, Google had opted all publishers into DRS, still without disclosing the program.

236. In the summer of 2016, without referring to the program's real name, Google told publishers it was launching a "revenue share-based optimization" that increased a publisher's yield. Google was referring to DRS, which in fact did not increase publisher yield.

237. Google continued to mislead advertisers and publishers about DRS and withheld critical information that advertisers and publishers could have used to make an informed decision about the program. Google did not disclose, for example, that it had been operating the program since 2014 or that DRS set floors *after* reviewing received bids. Peeking ahead at other exchanges' net bids, and then altering AdX's margin after reviewing its own received bids, permitted AdX to win when it should have lost based on publishers' inputs.

238. DRS was exclusionary and harmed competition in the exchange market. Manipulating floors and net bids *after* receiving bids based on a floor communicated in the bid request and *after* reviewing rival exchanges' net bids (which Google could do because of its monopoly ad server) prevented other exchanges from competing, including from competing on take rates. Only Google's exchange could set its take rate on an impression-basis *after* reviewing all of its rival's net bids. DRS enabled Google to avoid price competition without sacrificing market share, and to win impressions that it would otherwise have lost to lower-priced rivals. According to internal documents, turning on DRS gave AdX an additional \$250 million per year in transactions. Competing exchanges couldn't compete against Google's insider trading, and

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

Google's deception precluded advertisers and publishers from making informed decisions and switching to a more trustworthy and transparent exchange. Advertisers could not adjust their bid strategy to acquire inventory at lower prices.

**5. Google's Reserve Price Optimization Deceived and Injured Advertisers in the Ad Exchange Market.**

239. Google falsely represented that it was running a sealed-bid, second-price auction, inducing advertisers to reveal their true value bids, then used those bids against advertisers to secretly manipulate exchange floor prices and increase the amount advertisers paid for impressions on AdX.

240. Ordinarily, in an online ad auction, a publisher may set a reserve price, or floor price, fixing the minimum bid required to win the ad placement. If none of the bids exceed this reserve price, the winning bidder must pay the reserve price.

241. In 2015, Google's "gTrade" group implemented Reserve Price Optimization ("RPO"), expressly to push up the auction closing price. Google falsely told publishers and advertisers that AdX operated a second-price auction. Sealed-bid, second-price auctions are designed to allow bidders to safely reveal their true value bids, i.e., the true maximum a bidder is willing to pay, without wasting time and resources trying to guess what others will bid, and without having their true maximum number used against them by sellers, including in future auctions.

242. Under RPO, once advertisers had revealed their true value bids, Google secretly, and unilaterally, overrode publisher floor prices and set customized floor prices based on advertisers' historical bids. Suppose, for example, a publisher using the AdX exchange set a \$5 reserve floor price for an impression directed at Consumer Z; and suppose Advertiser A bids \$10

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

for that impression, Advertiser B bids \$7, and Advertiser C bids \$6. In an honest second-price auction, Advertiser A should win the impression at the amount of the second-highest bid, or \$7. Google told publishers and advertisers its auctions worked in this manner. But under RPO, in the next auction for an impression targeted at Consumer Z, Google would use an advertiser's former true value bids against them. In the next auction, RPO would secretly override the \$5 floor pre-set by the publisher and, instead, send Advertisers A, B and C a floor of \$9.95, \$6.95, and \$5.95, respectively. These custom floors were based on each specific advertiser's bid history for Consumer Z's impressions. In this scenario, the advertiser with the highest bid still wins the impression—but instead of paying the \$7 owed under the rules of an honest second-price auction, Advertiser A would pay \$9.75. The higher price is not generated by any activity from publishers or competing bidders, but, rather, by Google overriding the publisher's preset price floor and using advertisers' confidential information to their detriment.

243. When buyers think they are paying X, when the seller actually is extracting X plus Y—with Y being the difference between the second price and the actual price charged—the buyers cannot accurately compare the options available across the exchange market. As a result, a rival exchange could be charging X, or X plus a fraction of Y, and still lose to Google. Thus, Google's extraction of a hidden premium gave it a competitive advantage in the exchange market.

244. To determine the maximum a given advertiser would pay for an impression, RPO relied on inside information, provided in confidence and under false pretenses to Google's allegedly second-price exchange: advertisers' historic, true value bids. Google employees privately acknowledged that RPO should be based on "smarts and tech" rather than such "insider

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

information.” Google carried out this deception secretly and unilaterally, by reference to user IDs derived from Google’s publisher ad server and bid history data from Google’s AdX.

245. Internal documents demonstrate Google was fully aware that RPO was misleading and driving up prices paid by advertisers. In one internal email exchange discussing RPO, a Google employee asked: “Doesn’t that undermine the whole idea of second price auctions? I.e., the assurance that you can bid the maximum you’re willing to pay with no negative consequence. But if the publisher manufactures a floor based on your bid to get you to pay more than the second price, this principle gets violated.” Another Google employee wondered: “Is RPO not just basically pushing our second price auction—that is supposed to be fair—toward a first priced auction?”

246. Google launched RPO in early 2015, automatically subjecting advertisers and publishers to the program without their knowledge or consent. Google publicly denied plans to use such dynamic floors in its exchange. In response to a March 5, 2015, Digiday story based on leaked information that Google was planning to begin using dynamic price floors, Google spokeswoman Andrea Faville said: “That description doesn’t match anything in our current product suite or future roadmap.” But in fact, at that time, Google’s plans to launch RPO were well underway. Google had applied RPO to 10 percent of publishers by March 27, to 50 percent of publishers by April 7, and to all or most publishers by April 17.

247. At no point did Google correct its false statement that had no plans to use dynamic price floors. Instead, after deploying RPO, Google dissembled by encouraging publishers to adjust their exchange floors, *knowing RPO would override* these floors. Documents show that when Google internally considered being more transparent, it rejected disclosing RPO in favor of secrecy (at least until someone noticed).

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

248. Not until over a year after starting RPO, on May 12, 2016, did Google announce it was launching “optimized pricing.” Google did not disclose that RPO had been running for over a year or that it relied on inside information, and misled publishers and advertisers as to how the program worked. When approached by advertisers, Google told them that RPO was in their best interest. In one blog post disclosing RPO, Google assured advertisers that “optimized pricing” would provide a great return on their investment and open access to premium inventory. Google also falsely informed larger buyers that the dynamic pricing floors worked to their advantage even though they operated to drive prices up much closer to advertisers’ maximum willingness to pay. Internally, Google employees repeatedly acknowledged that RPO did not help advertisers in any way and that it in fact extracted extra money from advertisers. Google followed an outward-facing policy of silence on RPO except when pressed by advertisers.

249. Even after Google’s overdue, partial, and misleading disclosures regarding “optimized pricing,” Google led advertisers to believe that it was running an honest second-price auction, inducing them to continue submitting their true value bids—which Google continued to exploit against them dishonestly. Internally, Google employees expressed concern about the continuing lack of transparency concerning RPO and concern that suspicious buyers bearing higher costs would learn RPO was systematically raising the prices for ad placements.

250. Neither advertisers nor publishers participating in the AdX exchange could opt out of RPO.

251. Finally, in 2019, Google decided to drop any pretense of running a second-price auction and officially migrate to a first-price auction system. Even so, a form of RPO continues under codename “Bulbasaur.” Internal documents reveal Google’s view that because buyers now pay what they bid, Google needs to find other ways to increase income.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

252. RPO impacted billions of impressions transacted by Google's exchange. In an experiment measuring RPO's effect on exchange competition, Google found that RPO netted the company an additional \$250 million in annual, recurring revenue.

253. Google's RPO program has caused advertisers to suffer substantial harm in the form of artificially increased prices, and prevented rival exchanges from competing on the merits, as a direct result of Google's misleading, predatory conduct.

**6. Google's Unified Pricing Rules Harmed Competition in the Ad Exchange Market and the Markets for Ad-Buying Tools for Small and Large Advertisers, and Injured Advertisers.**

254. Through its DFP ad server, Google unlawfully forecloses competition in the exchange market and buying tool markets through Unified Pricing Rules first imposed on publishers in 2019.

255. Historically, publishers set different price floors for different exchanges and different buyers in the publisher ad server. Large publishers often invested considerable resources in fine-tuning and managing hundreds upon hundreds of different floors for various buyers and exchanges.

256. Publishers undertook this effort to increase revenue and improve the quality of ads returned to their site. Relative to its competitors, AdX and Google's buying tools have substantial information advantages concerning publishers' heterogeneous ad inventory. Setting different price floors for AdX and Google's buying tools enabled publishers to mitigate adverse selection problems caused by Google, thereby encouraging exchange and buyer participation (including those engaged in header bidding) and increasing overall yield. Publishers also set different floors for Google's exchange and buying tools to diversify the sources of demand for their inventory. By ensuring that rival exchanges and buying tools had a meaningful opportunity

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



to return live, competitive bids, publishers were able to reduce their reliance on Google, promote competition from header bidding, and increase yield. Publishers also set different price floors for AdX and Google's buying tools to improve the quality of the ads returned to their site and displayed to consumers. Publishers therefore used price floors to optimize decision-making to obtain the best yield possible while protecting their content from low-quality ads.

257. Google observed that the differing floors that publishers routinely set for AdX and Google buying tools were an impediment to Google increasing its market share in the exchange and buying tool markets. Google's intent in imposing Unified Pricing floors was to foreclose competition by preventing cost savings on other exchanges and shifting transactions to AdX. Thus, publishers' use of floors to find more economical alternatives to Google's exchange became something Google needed to "fix": "We should look at all real issues that we are aware of which incentivizes publishers to use other platforms (header bidding and pricing floors cutting off access etc.) that we should try to fix as soon as possible." Rather than improve the quality of ads returned by AdX and Google Ads, reduce its exchange take rate, or stop interfering with publishers' ability to share information about their heterogeneous inventory, Google chose to cut off publishers' ability to set differential floors.

258. Through Unified Pricing Rules, presented as a condition of publishers' continued use of Google's monopoly ad server (DFP), DFP cut off publishers' ability to set different floors for different exchanges and buyers—publishers must set the same price floor for different exchanges and the same price floor for different buyers. Google accomplished this change by exercising its discretion under its agreements with publishers to change the mandatory user interface within DFP. Participating publishers agreed and assented to the change by continuing

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

to use DFP. Google's written agreements for DFP customers also provide, explicitly or implicitly, that the publisher agrees to Google's rules and restrictions applicable to DFP.

259. Google's Unified Pricing Rules ensure that rival exchanges and buying tools are at a price disadvantage. Because Google's publisher ad server imposes extra fees to serve ad inventory sold on non-Google exchanges, Google's exchange can win an impression by returning a bid 5 to 10 percent lower than a rival exchange. Thus, instead of a level playing field, Google's price-parity rules guarantee that Google's exchange has a pricing *advantage* to win a publisher's impression. For example, if a publisher sets a \$10 floor, an advertiser bidding through Google's exchange can win that impression so long as its bid, after Google takes its cut, is at least \$10. An advertiser bidding through a non-Google exchange can win the impression only if its bid, after paying the non-Google exchange fee, is at least \$10.53 (\$10.53 minus Google's five-percent Exchange Bidding fee = \$10).

260. Google's Unified Pricing rules interfere with a publisher's ability to set prices in transactions in which Google has no interest as a buyer. Google's Unified Pricing Rules are imposed by Google's publisher ad server, and not by Google's exchange or buying tools. Therefore, publishers are restricted from setting exchange-specific or buyer-specific price floors whether or not Google's buying tools or exchange participate in the auction. Thus, even when Google is not an auction participant, publishers are still prohibited from making tradeoffs between price and quality or otherwise increasing yield from non-Google buying tools and exchanges by setting different floors.

261. In the past, Google had not impeded the setting of variable price floors for different sources of demand, so long as Google was in control. With its Reserve Price

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

Optimization (RPO) program, however, Google itself began secretly manipulating publishers' price floors.

262. Unified Pricing Rules disrupt publishers' routine use of floors to increase competition and yield. For example, one large publisher invested significant resources in developing and testing machine-learning algorithms that set a higher floor price for Google's AdX on a per-impression basis. The publisher applied those floors to mitigate the effect of Google's blocking rival exchanges from accessing impression information. Tests run by this large publisher showed that the ability to mitigate Google's information advantage through differential floors generated an 11 percent revenue gain for the publisher.

263. Given the monopoly position Google commands in publisher ad serving, and the high barriers to entry and high switching costs, publishers already have very little ability to substitute with rival ad servers. This didn't stop Google from deceiving publishers about the negative impacts of Unified Pricing Rules. Google misrepresented to publishers the reasons for adopting Unified Pricing and the effects of Unified Pricing for publishers. Externally, Google represented that eliminating differential price floors benefited publishers, but privately, Google recognized that Unified Pricing was "extremely self-serving."

264. Google's Unified Pricing Rules, enforced through combinations with publishers, foreclose competition in the exchange and ad-buying tool markets. For instance, a review of a publisher's auction records reveals that AdX drastically grew its share of impressions as a result of Unified Pricing restrictions. Unified Pricing resulted in AdX winning nearly double the number of impressions it used to—but paying roughly half as much. Records from one large publisher also show that Unified Pricing Rules resulted in Google's ad-buying tools tripling and quintupling the share of impressions they win.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

265. Unified Pricing Rules also result in AdX winning more because they coerce publishers to transact with Google ad-buying tools in AdX. Previously, publishers could choose to transact with DV360 only in non-Google exchanges by increasing DV360's price floors in AdX. Unified Pricing ended this practice and caused publishers to transact with DV360 and Google Ads exclusively in AdX.

266. These uniform pricing restrictions imposed upon publishers, together with the fees that Google imposes for transactions that occur off its exchange, impede the ability of competing exchanges to deliver impressions at lower prices. Similarly, barring publishers from setting different floors for different ad buyers reduced competition between ad-buying tools, resulting in publishers transacting a higher volume of impressions with Google ad-buying tools. Advertisers were harmed because the higher volume of commerce on Google's exchange and through its ad-buying tools that resulted from these restraints reduced their choices in the ad-buying tool and exchange markets and caused them to pay more to place ads through Google.

**7. Project Poirot and Project Elmo Harmed Competition in the Ad Exchange Market and the Market for Ad-Buying Tools for Large Advertisers, and Injured Advertisers.**

267. "[T]o combat the effects of header bidding," Google's gTrade cohort first devised project Poirot, which was initially designed to identify when a rival exchange was not running a true second-price auction. The algorithm relied on inputs from DV360's own bid data to detect and quantify any deviations from second-price auctions. Once detected, Poirot would typically adjust DV360's bid to avoid overpaying for an impression or providing the rival exchange with meaningful data about DV360's willingness to pay. Although DV360 was openly critical of "greedy" rival exchanges that claimed to run a true second-price auction while actually running a

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 “dirty” second-price auction, Google’s own exchange was engaging in the very same auction  
 2 manipulation, though Reserve Price Optimization, discussed above.

3 268. Thus, DV360 intentionally bid less on rival exchanges and increased bids on its  
 4 own ad exchange, ostensibly to avoid optimizations that were bad for advertisers, when DV360  
 5 was actually redirecting that ad spend to a marketplace that engaged in exactly the same  
 6 behavior. In reality, therefore, Google’s efforts to “protect” advertisers were a direct reallocation  
 7 of advertising dollars to Google’s own ad exchange with no actual benefit to advertisers.

8 269. Initial experiments regarding the effect of Poirot showed a negative revenue  
 9 impact to DV360, but Google’s main goal was depriving rival exchanges of sufficient scale  
 10 engaged in header bidding to compete with Google’s ad exchange: “Non-second price exchanges  
 11 will see a revenue drop in the range of 20-30% ... Overall [DV360] revenue impact is -1.9%.”

12 270. Google later extended Poirot to optimize bidding in first-price auctions like those  
 13 used by header-bidding exchanges. As one Google employee noted, “Our response to [header  
 14 bidding] has been a multi-pronged effort, which includes ... First-Price Auction Defenses in  
 15 [DV360] (since all [header bidding] is transacted through first-price auctions).” Google found  
 16 that this expansion of Poirot succeeded: “Poirot has actually been quite effective, resulting in  
 17 “[DV360] spending 7% more on AdX and reducing spend on most other exchanges.”

18 271. Elmo, another gTrade project designed to “protec[t] against header bidding,” is a  
 19 mechanism that reallocated ad spend away from rival exchanges engaged in header bidding.  
 20 Header bidding increased competition by routing a bid request across multiple exchanges.  
 21 Google devised Project Elmo to help DV360 identify when it saw the same bid request across  
 22 multiple exchanges, and it decreased overall ad spend on any exchange that it suspected  
 23 meaningfully engaged in header bidding.

272. Like Poirot, Elmo succeeded in its aims. By March 2018, Elmo had decreased DV360 ad spend on the largest user of header bidding by 25 percent, while also generating at least an additional 7.8 percent increase of DV360's spend on Google's ad exchange, or \$220 million. Just four months later, one internal Google document shows, Elmo had accomplished a reduction of 44 percent in ad spend across major rival exchanges overall.

273. Taken together, Poirot, Elmo, and other strategies to reduce spend on rival exchanges reflect Google's campaign to illegitimately undermine the success of header bidding and starve rival exchanges of their primary source of demand. According to one Google employee, the combined impact of these programs was on average a 21 percent revenue decrease on affected exchanges and a 16 percent increase in revenue (\$300 million) for Google's ad exchange, despite disadvantages on cost and quality.

274. Google's Poirot and Elmo initiatives harmed competition in the ad-exchange market and the market for ad tools for large advertisers by obtaining information about rival exchanges, locking advertisers into using DV360, and directing ad spending away from rival exchanges and toward AdX, all without competing on the merits of price or quality.

#### **8. Google's Imposition of Line-Item Caps and Redaction of Auction Data Harmed Competition in the Exchange Market and Injured Advertisers.**

275. Beginning in 2018, Google implemented a variety of changes in order to limit information publishers could access regarding the performance of rival exchanges. These changes made it more difficult for publishers to determine if using Google's newly developed Exchange Bidding would yield higher profits than exchanges that interfaced with header bidding.

276. First, Google stopped providing two key data fields in the auction records it provided to publishers: KeyPart and TimeUse2. KeyPart designates the number of ad

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

impressions and TimeUse2 measures the length of time of the ad impression. Analyzing these data fields allowed publishers to evaluate how exchanges in header bidding performed compared to exchanges going through Exchange Bidding. When Google redacted these data fields, it eliminated publishers' ability to compare the performance of exchange and header bidding. This frustrated publishers' ability to use header bidding and thus inhibited competition from header bidding.

277. Second, Google began splitting its bid-level and impression-level data, making it impossible for publishers to fully track auction results. Bid-level data gives publishers information concerning the bids submitted for particular impressions. Impression-level data informs the publisher which source won each impression. By splitting these data into distinct subsets, Google prevents its publisher customers from seeing if the highest bidder won.

278. These actions, implemented only after Google faced competition from header bidding, had no legitimate business purpose and were undertaken to repel competition from header bidding.

279. Moreover, Google limits publishers' ability to receive bids through header bidding by artificially capping publishers use of "line items"—an aspect of DFP that publishers must use to receive bids from exchanges in header bidding. Google exercises its discretion under its agreements with publishers to impose these limits through code embedded in the mandatory user interface within DFP. Participating publishers agreed and assented to the limits by continuing to use DFP. Google's written agreements for DFP customers also provide, explicitly or implicitly, that the publisher agrees to Google's rules and restrictions applicable to DFP.

280. DFP induces publishers to match, to the penny, a bid received from a header-bidding exchange (e.g., \$3.98) with a price corresponding exactly to a pre-existing ad server line

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

item (e.g., a line item with a price of \$3.98). If a publisher has a pre-existing line item with a price of \$3.90, but it receives a header-bidding exchange bid of \$3.98, the publisher's Google ad server rounds down the header bidding bid to the line item with the next closest price, e.g., to the line item with the price of \$3.90. Consequently, the publisher must create a large number of line items (e.g., line items with corresponding prices of \$3.90, \$3.91, \$3.92, \$3.93, \$3.94, \$3.95, \$3.96, \$3.97, \$3.98, and \$3.99) to capture a live, competitive bid from a header-bidding exchange.

281. The need to create many line items when interacting with header bidding is problematic because, to foreclose competition from header bidding, Google imposes restrictions on publishers that limit the number of line items a publisher may list. Google's documents confirm that its intent in imposing these artificial line-item caps was to deploy a "tool we have to fight [header bidding]." When publishers requested that Google increase the number of permissible line items so that they could use header bidding to capture authentic bids, Google rejected their requests or provided only temporary, limited increases.

282. Instead of increasing line items to enhance publisher clients' yields, Google's DFP undercuts their profits and harms advertisers. Fewer line items cause publishers' bids from header-bidding exchanges to be rounded down more often. As a result, the bids from header-bidding exchanges are generally *lower* than the bids from Google's exchange, including because the former are not subject to Exchange Bidding's additional fee. Thus, advertisers paid more for impressions as Exchange Bidding took market share from Header Bidding, a shift that resulted in part from Google's line-item caps.

283. Google's documents confirm that it limited the number of line items publishers could use, even though DFP could allow for a greater number to be implemented, to pressure

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



publishers to switch to Exchange Bidding, known internally as Jedi. As one employee explained to others, “[w]e need to push these pubs to using Jedi – if imposing more limits pushes them more to Jedi – then we should keep those limits in place.” Hence Google continued to enforce its restriction on publisher line items.

284. In a competitive market, an ad server would help publishers use header bidding to increase publishers’ yield. In fact, this is precisely what the OpenX ad server did when it incorporated header bidding through a single line item, eliminating the need for the multiple line-item set-up. Yet, because of Google’s anticompetitive restrictions, most publishers were locked in to using Google’s monopoly ad server and could not easily switch. With competition stifled in these interlocking markets, OpenX’s ad server was unable to gain share against Google’s monopoly and exited the market in 2019.

**C. Google’s Network Bidding Agreement with Meta and Its Imposition on Publishers of Uniform Pricing Rules and Line-Item Caps Unreasonably Restrain Trade.**

285. The NBA between defendants Google and Meta restrains trade in the final clearinghouse auctions for web and in-app impressions performed by Google in its Open Bidding and AdMob final auctions and is anticompetitive. Google’s agreements imposing Unified Pricing Rules on publishers restrain trade in the ad-exchange market and the markets for ad-buying tools for large and small advertisers by precluding publishers from setting different price floors for different, competing exchanges and ad-buying tools. Google also restrains trade in the exchange market with its agreements imposed on publishers that cap the number of line items they can use on header bidding.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

**1. The Network Bidding Agreement Places All Other Bidders Transacting Bids Through Google's Open Bidding and Final In-App Auctions at a Competitive Disadvantage.**

286. The Defendants' NBA (referred to internally as "Jedi Blue") became effective in September 2018 (Doc. 221-1). Under the agreement, Meta agreed to send a minimum volume of winning bid responses through Google's Open Bidding and AdMob auctions (referred to collectively as "Final Clearinghouse Auctions," NBA, ¶ 1.28). Meta received enhanced and proprietary data known only to Google which was not supplied to other bidders in its auctions (NBA, Ex. E).

287. Google agreed to use "reasonable efforts" to ensure that Meta would be able to identify the user on a minimum of 80% of the bid requests sent by Google to Meta from mobile apps and at least 60% of the bid requests sent by Google to Meta from websites on browsers that allow cookies (NBA, Ex. A, ¶ 3). Bid requests from identified users are more valuable to advertisers because identifying the user allows for more accurate targeting and reduces the chances of serving an ad to a "bot." Meta agreed to bid on 90% of the bid requests in which the end user was identified (NBA, Ex. A, ¶ 4), and to commit to a minimum annual spend (NBA, Ex. B, ¶¶ 2-4) and auction win-rate (NBA, Ex. A, ¶ 5).

288. Google also allowed Meta to respond to requests beyond the 160-millisecond timeout afforded to other Open Bidding bidders, giving Meta additional time to evaluate the bid request and submit a bid.

289. Google's commitment under its agreement to weed out a large majority of bid requests for which Meta cannot identify the end user, and Meta's enlarged timeout allowance, distort competition in the Final Clearinghouse Auctions by placing advertisers bidding against Meta at an informational and procedural disadvantage.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

290. Although the NBA contains terms governing the fees to be paid by Meta to Google for Google's auction services, the terms in the NBA that restrain trade are those governing the horizontal relationship between Meta's MAN and the competing advertiser intermediaries against whom MAN bids at auction. Meta offers its open display and in-app advertising services in order to monetize its enormous database of information on millions of its customers, and the proprietary and confidential data, including match information, provided by Google helps Meta do this. Other demand-side intermediaries also seek to assist publishers in monetizing their customer information by identifying end users—but they must bid against Meta without the benefit of the match-rate assurances and confidential end-user data that Google furnishes Meta under the NBA or the additional time to bid that Google allows Meta in practice.

291. The terms of the NBA that harm competition are not similar or analogous to discounts or allowances a seller might provide to a favored customer, because the economic value of those terms cannot be replicated by a payment from Google to Meta. The competition-distorting benefits enjoyed by Meta can only be granted by disadvantaging Meta's rival bidders in Google's auctions relative to Meta. Google does not itself pay for these benefits, but instead extracts them from Meta's competing bidders by impairing their position relative to Meta. Google must make competing bidders worse off in order to provide Meta with the informational advantages required by the NBA.

292. Google and Meta tightly controlled and coordinated information about the NBA, which contains strict confidentiality provisions. Bidders in Google's final ad auctions had no knowledge of the superior information that Google secretly provided to Meta. Possessing undisclosed information relevant to the advertising opportunity, Meta enjoyed a competitive advantage over other bidders for open display space. Meta's superior information, match rates,

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

and lengthened timeouts inflated the bids for Meta's rivals to win in Google's auctions above what those bids would have been had Meta not had access to such superior information or been offered these secret advantages.

293. The Defendants' agreement also sets forth mutual commitments to "cooperate and assist" one another in the event of any antitrust investigation related to their agreement, in which the word "antitrust" is mentioned no fewer than 20 times.

294. As the agreement itself indicates, the market in which the NBA unreasonably restrains trade is the market for open display and in-app ad inventory traded in Google's Final Clearinghouse Auctions, in which Meta competes with other demand-side intermediaries for publishers' and developers' inventory.

## **2. Google Combined with Publishers to Reduce Competition with Unified Pricing Rules and Line-Item Caps.**

295. As discussed above, the Unified Pricing Rules that Google imposed on publishers as a condition of their use of DFP prevents them from setting different price floors for different exchanges and ad-buying tools. In its Answer in *State of Texas v. Google LLC*, No. 4:20-cv-00957-SDJ, Doc. 67, ¶ 230 (E.D. Tex. Feb. 22, 2021), Google "admit[ted] that, as a result of the unified pricing rules, publishers can no longer set different floors for different buyers in Google Ad Manager's unified auction, including exchanges participating via Open Bidding, when bidding on the same inventory on behalf of the same advertiser; that a publisher can no longer use Google Ad Manager to set different price floors for two bidders in the same auction (e.g., Google Ads and The Trade Desk) if they are bidding on behalf of the same advertiser[.]" These restrictions have prevented publishers from routing their ad space to another exchange at a price floor lower than the floor they give to Google's exchange. Nor can a publisher give one bidder a

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

lower price floor than it gives to another bidder. Google's unlawful agreements also impose a 5 to 10 percent fee for transactions that clear on other exchanges. Google thereby both profits on trades outside its system and handicaps the competition that clears those trades.

296. Google also imposed restrictions on publishers that capped the number of line items they could use on header bidding. In its Answer in *State of Texas v. Google LLC*, No. 4:20-cv-00957-SDJ, Doc. 67, ¶ 205 (E.D. Tex. Feb. 22, 2021), Google admitted that its "ad server has limited the total number of line items that a publisher can create" as a condition of continued DFP use. Fewer line items cause publishers' bids from header bidding exchanges to be rounded down more often, with the result that bids from header-bidding exchanges are less competitive compared to the bids from Google's. Due to these restraints, therefore, a substantial percentage of auction transactions for ad impressions shifted to Google platforms.

## VII. INTERSTATE TRADE AND COMMERCE

297. Google's conduct as alleged herein has had a substantial effect on interstate and intrastate commerce.

298. At all material times, Google participated in the marketing, promotion, distribution, and sale of publication and advertising services for display advertisements in a continuous and uninterrupted flow of commerce across state and national lines and throughout the United States.

299. Google's conduct also had substantial intrastate effects in that, among other things, Google's publication and advertising services for display advertisements were sold in each state, including California. At least thousands of individuals in each state, including California, were impacted by Google's anticompetitive conduct. As alleged below, absent

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Not Expanded by / Condensed by

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

Google's unlawful conduct, Plaintiffs and class members within each state would have paid less or received more money for digital advertising services.

### VIII. ANTITRUST IMPACT

~~102. — Google's conduct set forth herein had the purpose and effect of excluding competition in the relevant~~ Having consolidated key portions of the ad tech stack for display advertising, Google now readily brokers transactions on both sides of this market, and can steer advertisers to its own display supply platforms like YouTube. As the U.K.'s CMA concluded in a report issued on July 1, 2020, "Google's strong position at each level of the intermediation value chain creates clear conflicts of interest, as it has the ability and incentive to exploit its position on both sides of a transaction to favour its own sources of supply and demand."

#### **2. — Google Harms Purchasers and Sellers of Online Advertising by Coercing the Purchase of Display Advertising Through Tying Arrangements**

~~104. — With about nine out of ten internet searches using Google's search engine, Google is the dominant source for search advertising. As a result, companies seeking to promote their products or services online have little or no choice but to purchase search advertising space from Google. Google has taken advantage of this dominance in the search advertising market to drive out competition in the separate market for display advertising services, tying its display advertising services to its search advertising services to extend its monopoly power.~~

~~105.1. — Because search advertising targets users who have already shown some interest in the product or service from their search, few online advertising campaigns bypass online search as a platform for marketing. Search advertising accounts for at least part of the ad spend of nearly every advertiser engaged in online advertising.~~

~~106. — When a Google Ads account is established for use in placing search advertisements, Google Ads is set as the default account for placing both search and display advertisements. Google also blocks advertisers from using third-party DSPs to purchase Google~~

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

Search inventory, which is sold primarily through Google AdWords. And, to further disadvantage rivals, Google restricts access to data relating to web searches performed on Google Search.

107. When consumers run Google searches, Google collects and retains data related to the searches. For example, Google Ads (a DSP) relies on algorithms that match keywords selected by advertisers to user search terms to determine which search ads pop up after which searches.

108. DSPs and advertisers use this data to craft more effective advertising campaigns. Google, however, withholds this data from rival DSPs and advertisers using rival service providers. As a result, an advertiser running both search and display ads cannot track the performance of its search ads unless it relies only on Google to place its display ads.

109. The effect of this policy is that, to access the search data over which Google has monopoly control and which is vital to effective online advertising, an advertiser is coerced into using Google's products in the separate market for display advertising services.

110. Advertisers that open a Google Ads account are required to buy Google search advertising. Thus, Google Ads does not merely steer advertisers to Google search advertising but conditions their ability to bid for publisher display space upon their purchase and use of Google search advertising.

111. Google's restrictive practices coerce any advertiser whose marketing pairs online search advertising with online display advertising to rely only on Google's intermediation services to place its display advertisements.

112. Exacerbating this tying conduct, Google pressures many advertisers to use only one Google buy-side intermediary to purchase ad space. This pressure results from Google's decision to scramble user IDs across multiple bidding tools instead of assigning and disclosing a single user ID to a particular advertiser. ~~Because Google obscures DoubleClick IDs for all parties other than Google, advertisers that use more than one buying tool at a time risk~~

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

~~inadvertently bidding against themselves in exchange transactions, driving up the price they would pay.~~

~~113.—Google’s Ads Data Hub (ADH) allows advertisers to view data from ad campaigns, including which users their search advertising campaigns reached, and to combine that data with internal or third-party data to set or adjust display advertising strategy. Nevertheless, the ability to use Google’s ADH data comes with a built-in restriction: the data can only be sent to another Google service and cannot otherwise be exported.~~

~~114.—In 2018, Google stopped allowing advertisers to access the encrypted user IDs from ad campaign reports. Advertisers need this information to hire non-Google ad campaign measurement firms. Advertisers that stay within Google’s “walled garden” and use its ADH product can still access these IDs.~~

~~115.—Google’s restrictive policies have made it virtually impossible for an online marketer to operate independently from the Google ad stack, particularly given Google’s dominance in the DSP, ad server, site analytics, and other submarket segments.~~

~~116.—Likewise, on the supply side, Google restricts publishers’ ability to access the bid data required to compare the performance of Google’s exchange with rival exchanges. And Google does not reveal to other market participants its own fees and commissions on transactions. As discussed further below, this lack of transparency that Google has unilaterally imposed across the ad stack undermines the ability of both advertisers and publishers to make the informed decisions necessary to drive competition.~~

~~117.—Google similarly uses its dominance in the video ad publishing market segment to coerce advertisers to use Google’s display advertising services.~~

~~118.—Google-owned YouTube is Google’s most valuable display property. YouTube is by far the most visited website in the United States, drawing more than three times the traffic of Twitter and Facebook, respectively. Nearly every business that advertises with online videos buys advertising space on YouTube, and about half of all video ads not appearing on Facebook and Amazon appear on YouTube.~~

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



119. Video has become increasingly important to online advertising campaigns because of its compelling nature and the exponential increase in user traffic that it generates. In 2019, 81% of businesses used video as a marketing tool up from 63% in 2018. By 2022, online videos will account for more than 82% of all consumer internet traffic—15 times higher than the corresponding percentage in 2017.

120. After Google purchased YouTube, it initially made YouTube's inventory of display advertising available to any advertising service provider. But in 2015, Google took YouTube off the digital ad exchanges, restricting its ad inventory to being purchased *only* through Google's brokering channels and bidding tools.

121. Consequently, advertisers can no longer purchase YouTube inventory using a third-party DSP. If an advertiser wants to purchase any of the valuable advertising space on YouTube, it must use Google's advertising services and cannot use any of Google's rivals' advertising services.

122. One erstwhile competitor described Google's requirement that Google services be used to place ads on YouTube as "the beginning of the end," noting that "Google used its monopoly on YouTube to put its hand on the scale" unfairly. Sen. Amy Klobuchar (D-MN) observed that this change "of course had a crippling effect on Google's rivals" and "not only forces YouTube's ad inventory into Google DSP, it also had the effect of driving non-YouTube ad volume to Google and away from the rival DSPs."

123. In 2018, Google also began restricting third-party ad servers from tracking viewing activity on YouTube, leaving Google-owned Display & Video 360 as the only product available to collect and analyze YouTube advertising data. This action effectively tied YouTube to Google Ads and Display & Video 360, preventing advertisers from using competitors' products to serve or analyze ads on YouTube.

124. Google's leveraging of its position in forums like YouTube in which it is the dominant ad publisher restrains competition with an enhanced effect because advertisers almost always use a single DSP for a given advertising campaign. Advertisers use a single DSP for a

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

~~campaign largely because doing so allows them to manage frequency caps (limits on the number of times the same user is shown an ad) during the campaign and facilitates audience management and reporting. Thus, if an advertiser wished to advertise on YouTube, Google Search, and other publisher websites, the advertiser would bear significant costs and inefficiencies from using a different advertising service provider to broker distribution of the ad campaign into each forum.~~

~~125. Even if an advertiser preferred to use multiple DSPs, Google does not permit it to use third-party DSPs to purchase Google Search inventory (sold primarily through Google AdWords) or Google's YouTube inventory. Because Google Search and YouTube, in addition to digital display, are essential to many online ad campaigns, Google is able to capitalize on its "must-have" inventory to tether advertisers to its DSP. And because advertisers typically use one DSP per ad campaign, a display advertiser that wants any of its ads to appear on Google Search or YouTube must use Google's DSP for the entire ad campaign. In short, Google enlisted its dominance in search and search advertising to pursue and secure a monopoly in display advertising.~~

~~126. Google has also combined ad tech stack products that were once technically separate but interdependent, reinforcing that they were effectively tied within the relevant market all along. For instance, using Google's ad server, formerly called DoubleClick for Publishers, was for many years the only way to obtain full access to Google's AdX exchange. That access was critical for publishers because AdX connected to AdWords, and the ability to access AdWords greatly expanded publishers' access to advertisers because of Google's dominance in search. As the *Wall Street Journal* reported, "[f]or many years, Google's AdX was the only ad exchange that had access to" Google's AdWords platform and its many advertisers. Thus, for example, when News Corp considered switching from Google to a different company to facilitate its ad-serving business, it reportedly "felt it would jeopardize the 40% to 60% of advertising demand it gets from Google's ad marketplaces . . . ." According to the *Journal*, Google in 2018 merged DoubleClick for Publishers and AdX "into a single product called Google Ad Manager, making it plain to the industry that they are indeed linked . . . ."~~

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

300. markets for ad exchanges, ad-buying tools for small advertisers and ad-buying tools for large advertisers. Absent Google's conduct, each of these markets would have been significantly more competitive and class members would have financially benefited from that increased competition.

301. Google's anticompetitive conduct and its monopoly and market power has caused ongoing and durable harm to competition in the markets for ad exchanges, ad-buying tools for small advertisers, and ad-buying tools for large advertisers. Google's monopoly and market power has enabled it to raise its prices above the competitive level to advertisers and, in turn, pay lower than competitive prices to publishers. Google has extracted monopoly rents in the form of fees it does not fairly disclose to other market participants.

127,302. Advertisers have suffered harm by paying higher prices due to Google's display advertising ~~monopoly~~ monopolies. During the class period, increases in the prices paid by advertisers to place online display ads have outpaced the rate of inflation as a result of Google's ability to charge supra-competitive prices free from any realistic competitive threat.

128,303. The investigation conducted by the House Subcommittee on Antitrust, Commercial, and Administrative Law revealed that many companies pay Google most of their online ad expenditures. For example, one major company paid well over half of its total ad spend to Google each year from 2016 to 2019, with the second top provider receiving less than 15%.

129,304. A 2018 study by eMarketer, which focused on programmatically purchased ads across the open internet, found that programmatic ad prices have risen meaningfully across all major display categories: desktop, mobile, mobile app, and video. In 2018, the average digital advertisement sold for 12% more than it did in 2016, an increase

108

~~FIRST AMENDED CONSOLIDATED CLASS ACTION COMPLAINT~~  
~~CASE NO. 5:20-cv-03556-BLF~~

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

approximately five times the prevailing rate of inflation. These price increases resulted in substantial part from Google's ~~consolidation of anticompetitive conduct in the intermediation services market~~ relevant markets and Google's price increases for those services, ~~and. These price increases~~ were largely borne by advertisers who paid Google for those services to broker the placement of their display ads.

~~130.305.~~ Bloomberg also reported that as of 2019, Google had increased the price of search ads by about 5% annually, a rate more than three times greater than the 1.6% inflation rate during the same time period. Likewise, Google's power in the relevant markets here enabled it to raise the prices of its brokering services to supra-competitive levels. The higher prices have increased Google's profits, but advertisers now receive less for each dollar they spend, with trading costs now accounting for half the cost of every trade on average.

~~131.—Google's power in the relevant market enabled it to raise the prices of its brokering services to supra-competitive levels. The higher prices have increased Google's profits, but advertisers now receive less for each dollar they spend, with trading costs now accounting for half the cost of every trade on average.~~

~~132.306.~~ A substantial portion of Google's trading fees are monopoly rents. Competitive market conditions would serve to reduce these fees.

~~133.307.~~ Advertisers have seen progressively lower returns on their digital advertising investments as Google built and reinforced its monopoly in the relevant ~~market~~ markets. And publishers have lost ad revenue because Google's entrenched monopoly has enabled it to take a comparatively larger ~~ent~~ portion of advertisers' payments for the placement of ads. There are no offsetting benefits to publishers that would negate the harm to advertisers from Google's anticompetitive conduct.

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

134,308. ~~The higher prices have greatly benefited Google. As a result of its digital advertising monopolies,~~ Google has consistently reaped profits at margins greater than 20%—almost three times more than the average profit margin for an American business. Financial analysts predict that Google is well positioned to maintain its dominance in digital advertising, noting that “Alphabet has established unusually deep competitive moats around its business.”

~~135. Google’s reserve price practices also have caused advertisers to pay higher prices. In its online ad auctions, Google sets a reserve or floor price, which corresponds to a minimum bid that is needed to win a particular ad placement. If none of the bids exceeds this reserve price, the winning bidder must pay the reserve price—a price that, by definition, is higher than the price that would have won the placement in an auction in which Google had not set a floor price. In fact, the majority of winning bids by advertisers are at the reserve price. The lack of competition from other ad auctions has allowed Google to impose these supra-competitive floor prices. At the same time, Google denies advertisers access to data they would need to accurately measure the success of their advertising campaigns and negotiate for lower prices.~~

~~309. Market participants such as advertisers and newspapers also lack visibility into the fees charged along the supply chain, which limits their ability to make optimal choices about how to buy or to sell advertising inventory. Google has foreclosed competition in the ad exchange market by blocking competition between exchanges and advantaging its exchange through processes like Dynamic Allocation and Enhanced Dynamic Allocation in its ad server; manipulating exchange auctions through secret programs like DRS and Bernanke; and preventing publishers from setting different price floors for different exchanges through imposition of Unified Pricing Rules. This exclusionary conduct harmed competition in the exchange market and harmed advertisers.~~

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

310. Google's exclusionary conduct has allowed it to charge a supra-competitive take rate in the exchange market, which is borne in part by advertisers. While Google's exchange competitors have lowered their take rates in response to competitive pressure, Google has maintained or increased its take rate over time. For example, in 2017, Google observed internally that market forces, including the advent of header bidding, were putting pressure on take rates in the exchange. In response to these market forces, Google's competitors lowered their exchange rates, with some of its competitors lowering their prices to 25 percent of what Google charged. Google, in contrast, *increased* its exchange take rate from 20 percent in 2017 to 22 percent in 2019 for third-party buyers buying through its exchange. Today, Google continues to charge a supra-competitive take rate, while the prices charged by Google's closest exchange competitors are considerably lower: from 5 to 15 percent.

311. Google's exclusionary conduct has also harmed quality in the exchange market. Google has created information asymmetries that exacerbate problems of adverse selection in the exchange market, allowing Google's exchange to win more high-value impressions and significantly lowering the quality of matches that competing exchanges can provide as compared to Google's exchange. This conduct harmed competition in the exchange market since rival exchanges were limited in their ability to compete on the quality of the matches provided. Google's exclusionary conduct has also caused competing exchanges to exit the market. Over ten years ago, Microsoft, Yahoo!, and top Silicon Valley venture funds competed in the exchange market, with the AdECN, AdBrite, and ADSDAQ exchanges; all three of these exchanges have since exited the market. The few remaining exchanges have been unable to compete with Google.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

312. Competition from new entrants has been weak because of the barriers to entry Google has created. For instance, Google has created an enormous barrier to entry by preventing small advertisers using Google's ad-buying tool from submitting live, competitive bids in non-Google exchanges, thereby eliminating a large source of demand from other exchanges and inhibiting potential new entrants from obtaining the scale necessary to successfully compete with Google. Competing exchanges have sought to compete for market share by lowering their take rates to 25 percent of Google's exchange take rates. But, because Google has obstructed competition, lowering prices does not permit rival exchanges to gain market share. In recent years, Google's anticompetitive conduct has significantly increased Google's market share without any decrease in its take rate.

313. Google's exclusionary conduct has resulted in harm to innovation. For many years, DFP depressed publishers' inventory yields by blocking real-time competition from non-Google exchanges. When publishers found a way to work around the restrictions imposed by DFP using header bidding, an innovative technology that promoted competition between exchanges, publishers' yields increased by over 30 percent, sometimes even over 100 percent. Rather than competing on the merits of its exchange and ad server, Google schemed to "kill" header bidding. This scheme was successful and substantially rolled back adoption and growth of header bidding while AdX continued to gain market share.

314. Google's harm to the competitive process has harmed advertisers. Because of Google's exclusionary conduct, advertisers are significantly less able to identify the user associated with an impression when transacting through a competing exchange with respect to transacting through Google's exchange and are thus forced to transact more on Google's exchange with a higher take rate. In a competitive market, advertisers and publishers would

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

benefit from exchanges competing on take rates and quality and from innovation that promotes exchange competition. Competition would produce lower take rates, benefiting advertisers. Advertisers would pay less to purchase ad space, permitting them to re-invest those cost savings into providing consumers with higher-quality and lower-priced goods and services. Google's foreclosure of competition in the exchange market has permitted its exchange to charge supra-competitive take rate (at least 19 to 22 percent on gross transactions) and provide lower-quality, sub-competitive brokering products. Google's anticompetitive and deceptive acts and practices have consequently reduced output in the exchange market.

315. Google's exclusionary conduct has foreclosed competition in both the market for ad-buying tools for small advertisers and the market for ad-buying tools for large advertisers. Google's exclusionary conduct in these markets includes advantaging its own buying tools through processes like Dynamic Allocation and Enhanced Dynamic Allocation in its ad server, and imposing Unified Pricing agreements on publishers. Google's exclusionary conduct of manipulating advertiser bids in exchange auctions through the Bernanke program harmed competition in the market for buying tools for small advertisers and thereby harmed small advertisers.

316. Google's exclusionary conduct has lowered the quality of its ad-buying tools. Google even internally admitted to "artificially handicapping" Google Ads (its buying tool for small advertisers) by preventing small advertisers from submitting live, competitive bids on any exchange other than Google's AdX exchange so that these small advertisers would then "boost the attractiveness" of AdX to publishers. In a competitive market, ad-buying tools would compete on quality and allow advertisers to bid in multiple exchanges.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



317. Google's exclusionary conduct has created barriers to entry, inhibiting competition from potential new entrants to the ad-buying tool markets. Large technology companies like Microsoft and Facebook have considered but decided against entering the market for display advertiser buying tools.

318. Google's harm to the competitive process has harmed both small and large advertisers. In a competitive market, advertisers would benefit from ad-buying tools competing on price and quality (e.g., the extent to which the tools maximize advertisers' best interests). Google's exclusionary conduct has permitted its ad-buying tool for small advertisers to charge supra-competitive fees and decrease quality below competitive levels (e.g., charging non-transparent fees, manipulating advertisers' bids to purchase ad space for higher prices trading on AdX, and arbitraging small advertisers' bids to extract higher fees). Similarly, Google's exclusionary conduct has permitted Google's ad-buying tool for large advertisers to charge supra-competitive fees and decrease quality below competitive levels (e.g., the failure to adequately audit Google's conflicts of interests and serving of fraudulent impressions). Google's conduct has consequently also lowered output in these markets.

319. Google's harm to the competitive process in the ad-buying tool markets has also harmed advertisers' customers—American citizens. The fees that advertisers would save on ad-buying tools and ad purchases in the absence of Google's anticompetitive conduct would result in reduced costs that advertisers would ultimately pass on to consumers. Consumers would benefit through better-quality, lower-priced goods and services. Advertising also allows consumers to learn of the range of competitors in a market, their prices, and the nature of the products and services offered. When advertising effectiveness is reduced, competition between products and services is reduced, and consumers are harmed.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

~~136.1. A competitive marketplace would benefit both advertisers and the public. In a competitive market, advertisers would pay less to have their ads placed, publishers would receive more for placing the ads on their websites, and the public would pay lower prices as well as benefiting from innovations in digital advertising. But with ~~A market participant observed in congressional testimony that “Google could make the process ‘more transparent,’ but given Google’s financial stake in maintaining secrecy, ‘there is no incentive to do so.’”~~~~

~~137. The foreclosure of competition in digital advertising markets resulting from Google’s monopoly has harmed the public at large. When advertisers pay supra-competitive fees to brokers like Google for placing ads, they pass on a portion of those costs to their customers by marking up the prices of their goods and services. And when publishers receive anticompetitive underpayments for running ads, they are often forced to cut costs, including through layoffs, and hence cannot produce content of the same quality or variety. Finally, by eliminating competition, Google’s display advertising monopoly also has reduced the incentive to innovate in these markets and thereby deprived the public of the benefit of improvements in advertising services and delivery.~~

~~**D. Google Created and Has Maintained Its Monopoly in Display Advertising Services by Restricting the Ability of Rivals to Compete on Equal Footing**~~

~~138. Google has engaged in a host of anticompetitive practices, including the leveraging of its monopoly in search and search advertising and the multiple tying arrangements discussed above, to disadvantage its rivals and cement its dominance in the display advertising services market.~~

~~139. Another key monopolistic practice that Google employs is denying interoperability—that is, Google denies the ability of its own advertising service systems to interface with the systems of rival advertising service providers, where those systems once were compatible.~~

~~140. Google’s set of anticompetitive acts described in this complaint, including its~~

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

monopoly leveraging, tying, exploitation of user data, and foreclosure of technological compatibility, were part of a unified, long-term strategy to exclude competition in the relevant market. While each component of that strategy, by itself, may not have sufficed to allow Google to monopolize the relevant market, their combined effect was to roll back competition, giving Google untrammelled power across the ad tech stack connecting advertisers and publishers of display advertising.

141. Although Google has publicly claimed that publishers can “mix and match technology partners,” that claim is false in several important respects. Google changed its practices to deny interoperability with its rivals to squelch competition that would otherwise occur within Google’s SSP system. When accepting bids from advertising services, Google’s SSP operates more efficiently with Google’s own advertising service. Although Google’s SSP can accept bids from non-Google advertising services, Google’s SSP is inefficient by design at processing those bids, and they are therefore disadvantaged as compared to bids submitted by Google’s own advertising service. As the U.K.’s CMA explained in its July 1, 2020 report, if a publisher “uses a non-Google ad server, AdX would not participate in a real-time auction with other SSPs, but would compete with an ‘expected’ price, which determines the order in which SSPs are sent an ad request” and “is inefficient for the publisher.”

142. Google, in short, runs an auction that includes its own bids, which are prioritized by the auction system that Google designed in such a way that non-Google-based bids cannot effectively compete. Imagine if this were a live, in-person auction: Google would be the auctioneer as well as a bidder, and it would have designed the process so that the other bidders could not hear the live bids, but instead would need to submit in advance bids based on guesses about what the other bids were going to be. Exacerbating these conflicts, Google is also a seller of a portion of the inventory up for bid.

143. Google also imposed new restrictions on publishers’ ability to set differential

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

price floors, preventing them from calibrating different pricing for different SSPs or DSPs. This change had its intended result of driving more brokering business to Google on the sell side because publishers could no longer set higher floor prices for Google than for other sources of demand.

144. Moreover, Google's asymmetric approach to sharing websites' DoubleClick user IDs has distorted competition among buying tools seeking to purchase ad space from Google's exchange—i.e., the limited number of buying tools that still compete with Display & Video 360 and Google Ads. Google's exchange shares users' DoubleClick IDs with Google-owned buying tools. But, when sending bid requests to non-Google intermediaries, Google's exchange shares a different ID value that is obscured from view.

145. Google's scrambling of IDs in this manner has directly interfered with competition. An advertiser that uses Google's DoubleClick ad server now has a much harder time using a non-Google buying tool because the two tools operate on different user IDs.

146. Still another example of Google's exclusionary conduct involves technology called header bidding, a system designed by Google's competitors on the sell side to compete with Google's display advertising exchange. Google responded to header bidding not by accepting the free and open competition it otherwise would have fostered, but by preventing its systems from working with the javascript code that publishers usually placed on their websites to enable header bidding. The result of this lack of compatibility was that the publisher would first notify non-Google exchanges and the winning bid would be sent to Google as if it were a pre-existing contract price. Thus, instead of submitting a blind bid to the publisher for how much the publisher would be paid to place an ad on its website, Google would separately receive the bids submitted by other service providers and then submit its own bid, knowing the minimum price it would need to outbid its rivals. This rigging gave Google a significant advantage over its rival brokers because, unlike Google, they would need to submit aggressive bids to ensure their bid was the most attractive—and even then Google could outbid them to win display advertising business.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

147. — Google’s rivals lacked Google’s market dominance and therefore could not make their systems incompatible with header bidding as Google did. Had they done so, a publisher simply would not have received bids from them. Even after Google permitted non-Google service providers to integrate with Google’s “Open Bidding” system—its exclusionary response to header bidding—Google charged the winning bidder 5–10% of the winning bid, driving up the costs to Google’s rivals of merely attempting to compete with Google. This structure also gives Google a systematic advantage in bidding to place ads because it does not charge itself these fees.

148. — Similarly, when Google launched its Accelerated Mobile Pages, or “AMP,” it made the pages incompatible with header bidding, coercing publishers to use Google’s Open Bidding system. And to further repel competition created by header bidding, Google began conditioning premium treatment on Google Search (*i.e.*, being featured at the top of search results) upon publishers migrating to AMP and forgoing the use of header bidding.

149. — As Mr. Heimlich, the digital marketing expert, described in his Senate testimony, “Google became the only display company not hobbled by the exclusions and restrictions it’d placed on everyone else. The power to interoperate among buy-side, sell-side and measurement software went from being a feature of the exchange ecosystem to a capability exclusive to Google.” That exclusive capability fortified Google’s power to exclude rivals and allowed it to further boost its share of the display advertising services market, unfettered by any meaningful competition.

**E. — Google Maintains Its Display Advertising Monopoly with Harmful Anticompetitive Conduct**

150. — Google maintains a culture of secrecy around its advertising services, a culture made possible by its market power. When acting as an intermediary, Google conceals from publishers and advertisers the price actually paid to Google for an ad placement. Even so, the consensus among knowledgeable publishers and advertisers is that Google’s “ad tech tax” is high, particularly in comparison to fees charged in non-programmatic ad markets.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

151. Google is competing with other sellers of display advertising, yet because it is also acting as the broker for these sales, Google has unique information which it denies to the buyers and other sellers to protect its monopoly. Google refuses to disclose even basic information, including the fees it charges for each transaction, to other participants in the ad tech stack, causing market-distorting inefficiencies that solidify its grip on display advertising.

152. Google redacts its take rate from trading or auction records on both the buy side and the sell side. Service providers in competitive markets, by contrast, generally must furnish their customers detailed accounts of the services they are providing to justify the prices they charge. Studies have shown that about 15% of display advertising transaction costs are unaccounted for: these are Google's monopoly rents.

153. In surveys conducted by Association of National Advertisers estimating take rates, participants reported it was impossible or very difficult to obtain transaction-level pricing data related to Google's brokering services. This lack of transparency makes it harder for publishers to negotiate with advertisers, and for potential competitors to compete with Google.

154. Google also removes time stamp information on bids, which publishers previously had used to optimize their pricing. Moreover, Google conceals information about the performance of the digital ads it brokers, such as how many impressions are shown to actual users, as opposed to bots. Google's multiple failures of transparency reinforce its power in the display ad market and prevent advertisers from knowing if they are wasting some of their spend.

155. Google's lack of transparency is strong evidence of its monopoly power. If Google were subjected to competition in the relevant market, it could not conceal from advertisers and publishers information that Google collects related to their transactions for the placement of display ads. In a competitive market, Google would risk losing business to more transparent rivals, as both advertisers and publishers have an interest in learning, assessing, and modulating their advertising efforts in response to information related to those transactions.

156. Google's lack of transparency is not limited to withholding of information. When advertisers use the Google Ads tool to bid on ad space belonging to third party publishers from

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

Google's exchange, Google does not disclose to them the price at which the ad space actually cleared. Google can thus arbitrage advertisers' bids across two Google-controlled marketplaces—a fact that may go unnoticed by small business and other advertisers due to the sheer complexity of Google's terms, including in its various "Help" documents. Read as a whole, the terms appear to permit Google to process bids that advertisers submit via Google's buying tool for smaller advertisers (known as Google Ads) through two different Google marketplaces (auctions). In other words, Google Ads hosts a first auction, and then Google Ads acts as the "buyer" in Google's exchange, so that Google simultaneously acts on the buy side and the sell side. Google implicitly confirmed this practice to Australia's competition authority.

157. Google has claimed implausibly that the conflicts of interest now present in its digital advertising business should lead to market efficiencies rather than distortions, asserting that "the combination of Google's search business and its vertical ad tech integration should give it incentives to balance the interests of all ecosystem participants." But market data tell a different story. Google's public filings show that the differential in allocation of advertising revenues between Google and non-Google properties has consistently increased. In 2007, the share going to Google properties increased to 64%, in 2008 to 68%, eventually to 71% (2011), then 75% (2014), 77% (2015), 80% (2016), 81% (2017), and 82% (2018). This percentage increased again in 2019, with just 16% of the \$134 billion that advertisers spent through Google going to the more than 2 million non-Google properties that sell their ad space through Google's exchange and buying tools. These widening percentages well demonstrate the market distortions now favoring Google, and they correspond to—and resulted from—Google's steady acquisition of monopoly power in the ad tech stack.

158. As discussed above, Google has ready access to enormous amounts of consumer data, yet it has also acted to prevent competitors from obtaining similar information. In January 2020, for instance, Google announced that it would "phase out" the third-party cookies in its Chrome browser that help advertisers target consumers based on demographics, past browsing history, and other information. As a result, competing exchanges and buying tools soon will no

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 longer be able to use cookies to assign user IDs for the purpose of buying and selling ads.

2 Without access to third-party cookies, it will be much harder for advertisers and competing  
3 service providers to bid rationally on ads. Yet that is not so for Google, which will continue to  
4 have other sources for gleaning robust data on consumers. Google Chrome has begun tracking  
5 users' web activity directly at the browser level, obviating Google's need to rely on cookies for  
6 identity information.

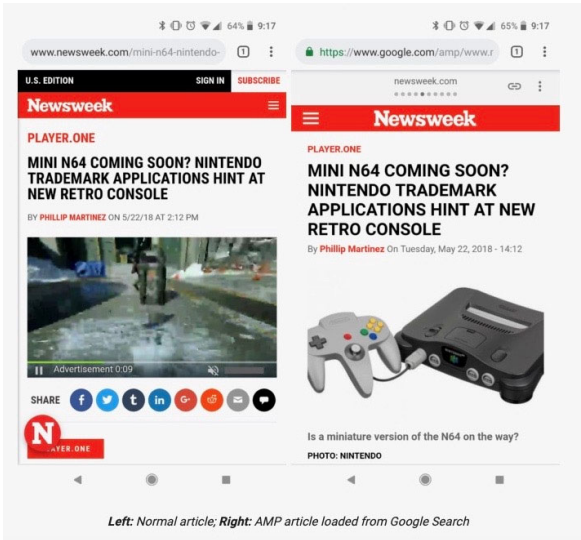
7 159. In 2016, Google launched AMP for the stated purpose of loading web pages faster  
8 on mobile devices. AMP is a framework that websites can use to create fast-loading mobile web  
9 pages. By limiting the types of programming codes that can be used on a page, AMP pages load  
10 faster than they otherwise would. When a user clicks on an AMP link from Google Search,  
11 instead of being routed to the page on the third-party site's server, the user sees a cached version  
12 stored on Google's own servers via its Content Delivery Network.

13 160. Google encourages publishers to use AMP web pages and lists them first in a  
14 search. But, because the pages are *Google* pages, publishers are unable to gather data about their  
15 own users as they normally would. For example, in the below image, the left side shows a  
16 *Newsweek* article on its own server. The right side shows the same article, but on a Google-  
17 hosted page the user would see after clicking on the AMP-loaded link via Google Search:

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"





162. — Google’s strategy to host more and more content on its own servers demonstrates that Google views content providers themselves as long-term competitors for the capture of ad dollars. More than half of the desktop searches on Google keep users on Google properties rather than prompting clicks to the rest of the web. For mobile searches, 70% of Google searches keep users on Google properties. The percent of Google’s revenue from advertising dollars spent on its own properties increased from 64% in 2007 to 85% in 2020.

163. — The report issued on October 6, 2020 by the House Subcommittee on Antitrust, Commercial, and Administrative Law notes that, “in the context of Google’s placement of news on accelerated mobile pages (AMP) . . . publishers raised concerns that ‘Google effectively gave news publishers little choice but to adopt it,’ requiring the creation of parallel websites ‘that are hosted, stored and served from Google’s servers rather than their own.’”

164. — A recent study by the News Media Alliance found that in 2018, Google gained over \$4 billion in revenue from crawling and scraping news content, and running associated display ads, without paying the publishers for that use. Google was able to take these steps

because of its monopoly power over display advertising.

165. — Considered as a whole, Google’s activity in the ad tech stack reflects a long-term strategy to monopolize display advertising. Through acquiring rivals, leveraging its monopoly in search, tying display advertising to search advertising, denying the interoperability of its products with others, exploiting conflicts of interest, and withholding information from other market participants, Google has effectively created a “walled garden” for display advertising. Google sells its own display advertising inventory even as it brokers a large majority of all display advertising sales, inhibits potential rivals from competing by denying them information and equal footing in the intermediation process it controls, and has acquired any company that threatens its display advertising services monopoly. Google profits illegally from its walled garden by plucking the fruit every step of the way.

#### **F. — Government Investigations and Actions Regarding Google’s Monopolistic Activities**

166. — In July 2019, the United States Department of Justice announced that it had opened an investigation into whether Google is committing illegal monopolistic acts. The DOJ stated that its probe would focus on whether and how Google and other leading online platforms “have achieved market power and are engaging in practices that have reduced competition, stifled innovation, or otherwise harmed consumers.”

167. — DOJ’s ensuing civil action — joined by eleven state attorneys general and filed on October 20, 2020 in the United States District Court for the District of Columbia — focuses on Google’s monopoly conduct in the markets for online search, search advertising, and search text advertising. The complaint of these governmental enforcers alleges that Google acted unlawfully to preserve these monopolies after having “created continuous and self-reinforcing monopolies in multiple markets.”

168. — As a result of Google’s monopoly conduct, the enforcers allege, consumers are “forced to accept Google’s policies, privacy practices, and use of personal data; and new companies with innovative business models cannot emerge from Google’s long shadow.”

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

169. The governmental enforcers further note that Google's conduct and internal messaging demonstrate its executives' awareness that Google has used its monopoly power to restrain competition: "Google employees were instructed to avoid using terms such as 'bundle,' 'tie,' 'crush,' 'kill,' 'hurt,' or 'block' competition, and to avoid observing that Google has 'market power' in any market."

170. The governmental enforcers seek, among other relief, "structural relief as needed to cure any anticompetitive harm" and an injunction forbidding Google's anticompetitive practices: "Absent a court order, Google will continue executing its anticompetitive strategy, crippling the competitive process, reducing consumer choice, and stifling innovation."

171. The attorneys general of every state except Alabama are separately investigating Google for monopolization. In September 2019, the attorneys general of 48 states, and of the District of Columbia and Puerto Rico, led by Texas Attorney General Ken Paxton, disclosed that they had opened an investigation into whether Google is violating the antitrust laws. In announcing the investigation, Mr. Paxton referred to "evidence that Google's business practices may have undermined consumer choice, stifled innovation, violated users' privacy, and put Google in control of the flow and dissemination of online information."

172. On May 15, 2020, the *Wall Street Journal* reported based on information from "people familiar with the matter" that "[m]uch of the states' investigation has focused on Google's online advertising business. The company owns the dominant tool at every link in the complex chain between online publishers and advertisers."

173. The Texas Attorney General served Google with extensive civil investigative demands for documents and information on September 9, 2019 and on June 22, 2020. These demands focus almost exclusively on Google's business decisions and conduct in the market for display advertising services, *i.e.*, the ad tech stack.

174. On July 9, 2020, news media reported that the California Attorney General's Office had opened its own independent antitrust investigation of Google.

175. On July 29, 2020, the House Subcommittee on Antitrust, Commercial, and

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

Administrative Law of the House Judiciary Committee held hearings on the subject of “Online Platforms and Market Power: Examining the Dominance of Amazon, Apple, Facebook, and Google.” Google CEO Sundar Pichai appeared for questioning by members of Congress, including regarding whether Google has abused its position as the default web gateway with its dominant search engine. The Subcommittee Chair, Rep. David N. Cicilline (D-RI), noted the “harmful economic effects” of the market dominance of Google and the other companies under scrutiny for monopoly conduct: “They discourage entrepreneurship, destroy jobs, hike costs, and degrade quality.”

176. — On October 6, 2020, the House Subcommittee issued a report entitled “Investigation of Competition in Digital Markets.” The report finds that, “[w]ith a sizeable share in the ad-exchange market, ad-intermediary market, and as a leading supplier of ad-space, Google simultaneously acts on behalf of publishers and advertisers, while also trading for itself—a set of conflicting interests that market participants say enable Google to favor itself and create significant information asymmetries from which Google benefits.”

177.1 The House report recognizes that Google’s series of acquisitions in the relevant market “enabled it to gain a controlling position across an entire supply chain or ecosystem. Google’s acquisitions of DoubleClick, AdMob, and AdMob . . . let Google achieve a commanding position across the digital ad tech market.”

178. — On September 15, 2020, the Subcommittee on Antitrust, Competition Policy, and Consumer Rights of the Senate Judiciary Committee held a hearing on the subject of “Stacking the Tech: Has Google Harmed Competition in Online Advertising?” Questioning Google’s witness, Sen. Josh Hawley (R-MO) took note of its “enormous advantage in this ad stack that you control every single layer of.” Google controls “the entire ad stack from top to bottom,” he further explained:

And you’re using your position in search and YouTube in order to give yourselves a dominant position in the ad stack, and not just on the demand side . . . but also on the supply side. . . . I think the concern is,

125

FIRST AMENDED CONSOLIDATED CLASS ACTION COMPLAINT  
CASE NO. 5:20-cv-03556-BLF

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

is that you control YouTube and search, which are the dominant platforms; you control massive amounts of consumer data that you have harvested from your other consumer-facing platforms—Gmail, Google Maps, G-Suite, etcetera. You then use those advantages in the ad stack at every single layer, every layer of which you exercise dominance in.

Senator Hawley concluded: “This looks like monopoly upon monopoly, in a classic case of tying.”

181. —Senator Klobuchar added that “Google may be taking between 30 and 70 percent of every advertising dollar spent by advertisers using its services, depriving publishers of that revenue.” She also stated that, “[w]ith the benefit of hindsight, it seems obvious that [Google’s] acquisitions were undertaken by the company in order to add to its market share and without explanation . . . other than for Google to establish and maintain the monopoly power it currently has.”

182. —Sen. Richard Blumenthal (D-CT) stated that Google has committed “quite simply a stunning abuse of market power.” Senator Blumenthal termed Google’s position in regard to its digital advertising monopoly “indefensible,” noting that

in no other market does the same party represent the seller, the buyer, make the rules and conduct the auction. . . . Given that Google operates the exchange and it competes with publishers on that exchange, that is a classic risk of insider trading. If you compare it as Google has to the stock market, Google would have been prosecuted long ago for insider trading.

184. —Google has already met with significant regulatory action in Europe. The European Commission fined Google \$2.7 billion in 2017 for rigging search results to favor its own online shopping portal and \$1.7 billion in 2019 for dictating to other websites how they can display search results from Google’s competitors.

185. —In December 2019, France’s competition authority fined Google \$166 million following a lengthy investigation into Google’s online advertising practices. France sanctioned Google for adopting “opaque and difficult to understand” rules for its ad platform and for applying them in an “unfair and random manner.” According to *TechCrunch*, the French governing body also found that “another element of Google ad rules could lead sites to favor a

content policy aligned with its own ad-funded services—thereby pushing online publishers to adopt an economic model that deeds and benefits its own.” The French governing body summarized its bases for fining Google as follows:

[T]he French Competition Authority considers that the Google Ads operating rules imposed by Google on advertisers are established and applied under non-objective, non-transparent and discriminatory conditions. The opacity and lack of objectivity of these rules make it very difficult for advertisers to apply them, while Google has all the discretion to modify its interpretation of the rules in a way that is difficult to predict, and decide accordingly whether the sites comply with them or not. This allows Google to apply them in a discriminatory or inconsistent manner. This leads to damage both for advertisers and for search engine users.

187. On July 1, 2020, the U.K.’s Competition and Markets Authority released a 437-page report entitled “Online Platforms and Digital Advertising: Market Study Final Report.” The CMA found that Google has dominant market share positions at each level within the ad tech ecosystem, with particularly high shares of at least 80% in both the publisher ad server and advertising markets. The CMA further found that Google “has been able to leverage the market power from its owned and operated advertising inventory into the open display market and within the ad tech stack, making it harder for third-party intermediaries to compete,” and that “greater competition and transparency would put downward pressure on” fees borne by advertisers and publishers. Additionally, the CMA found that Google has deployed its dominant market positions by engaging in “self-preferencing behaviour,” such as precluding publishers using Google Ad Manager from setting different floor prices for different buyers, a policy shift that substantially increased “Google demand’s win rate.”

188. In response to Google’s attempts to justify its lack of transparency and other practices by invoking data privacy laws, the CMA observed that “Google itself” has proposed technologies “to allow targeted advertising without user profiling,” and that Google has an obvious incentive to interpret data protection laws in a self-serving way to “entrench[] its own competitive advantage, including by denying third parties access to data that is necessary for

targeting, attribution, verification and fee or price assessment” while preserving its own right to use that data within its “walled garden.”

#### ~~V.I. — INTERSTATE TRADE AND COMMERCE~~

~~189.1. Google’s conduct as alleged herein has had a substantial effect on interstate and intrastate commerce.~~

~~190.1. At all material times, Google participated in the marketing, promotion, distribution, and sale of publication and advertising services for display advertisements in a continuous and uninterrupted flow of commerce across state and national lines and throughout the United States.~~

~~191.1. Google’s conduct also had substantial intrastate effects in that, among other things, Google’s publication and advertising services for display advertisements were sold in each state, including California. At least thousands of individuals in each state, including California, were impacted by Google’s anticompetitive conduct. As alleged below, absent Google’s unlawful conduct, Plaintiffs and class members within each state would have paid less or received more money for digital advertising services.~~

#### ~~VI. — RELEVANT MARKET~~

~~192. — Google’s anticompetitive conduct has restrained competition in the market for online display advertising services, encompassing the overall system or process that connects online display advertisers and publishers (including Google). This market, colloquially known as the “ad tech stack” or “ad stack,” comprises various segments and is the relevant market that Google monopolized for purposes of this action.~~

~~193. — The relevant geographic market is the United States. Market participants recognize this in the ordinary course of business. For example, Google offers display advertisers the ability to target and deliver ads based on the location of publishers or consumers~~

Formatted: Font: Times New Roman

Formatted: Heading 1, Indent: Left: 0.5"

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

Formatted: Not Expanded by / Condensed by

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

~~in the United States. Google also separately tracks display advertising revenue for the United States.~~

~~194. Google is the dominant provider of online search and search advertising in the United States—over 90% of internet searches are performed on Google’s search engine—and used its dominant position in those markets to restrain trade in the separate market for display advertising services.~~

~~195. The display advertising services market comprises advertising services and platforms, and publishing services and platforms. Google has monopolized each of the relevant submarkets of the overall market for display advertising services, including the subsidiary markets for publisher ad servers, supply-side platforms, demand-side platforms, and advertiser ad servers. Google’s conduct had the intent and effect of suppressing competition in the display advertising services market as well as in each of its component submarkets, and converting those submarkets into a single intermediation market under its control.~~

~~196. Google controls well over 90% of the PAS submarket and more than half of the SSP and associated ad-exchange submarket. Likewise, on the demand side, Google controls 80-90% of the AAS submarket and at least 60% of the DSP submarket.~~

~~197. Google has wielded its market power to integrate each submarket of the ad stack into a single set of bundled services, with the intent and effect of preventing and discouraging competitors (other display advertising services providers), publishers, and advertisers from relying on advertising service providers on a product-by-product basis. Google’s anticompetitive conduct has foreclosed competition, eliminating the ability of each segment of the display advertising services process, and the process as a whole, to function as a free and independent market. As a result of Google’s conduct detailed in this complaint, Google has succeeded in combining the various subcomponents of the intermediation market for display advertising into one market—and a large and continually increasing majority of advertisers and publishers recognize and submit to this economic reality by paying only Google for display advertising brokering services.~~

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



198. Digital display advertising on the open web is a “market” under antitrust law even though advertisers may engage in other forms of digital advertising as well. Online display advertising is at base a matching problem. On one side are publishers who produce content, and earn revenue by displaying ads to users. On the other side are advertisers who are interested in displaying ads to particular users (e.g., based on demographics or market segments). The online user population is fragmented across hundreds of thousands of publishers, preventing advertisers from reaching desired customers without assistance from an intermediary. Likewise, given the vast number of advertisers interested in displaying their ads, most publishers would find it very difficult to maintain the corresponding business relationships.

199. Display advertising brokering services have no reasonable substitute for purposes of marketing goods or services in today’s economy. While it is theoretically possible for an advertiser to connect directly with a publisher to negotiate the placement of advertisements onto the publisher’s supply of advertising space, for the vast majority of advertisers doing so is impractical and very rare. At least 90% of all online display advertising space in the United States is bought and sold on ad exchanges in the electronic real time bidding market.

200. Nearly all advertisers lack the resources and access to be able to negotiate directly with particular publishers to place their display advertisements, and even advertisers with the ability to do so prefer not to limit their placement of display advertisements to discrete websites. Publishers and advertisers thus generally rely on third party display advertising services to facilitate the placement of online display advertisements.

201. In the rare instances where select advertisers can purchase “directly from the publisher” they can do so via manual media buying, programmatic direct buying, or a private, invite-only marketplace (PMP). Manual media buying is antiquated and now seldomly if ever done. Programmatic direct and private auctions are the only current ways to purchase advertising directly from publishers. Programmatic direct buying is done under extremely

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 ~~limited circumstances of either specific invite from the publisher to participate in a private~~  
2 ~~auction, or directly, without an auction, at ultra premium prices most advertisers cannot afford.~~  
3 ~~Ads sold through programmatic direct are typically tied to premium publishers (e.g., *Forbes*) that~~  
4 ~~reserve a limited percentage of their inventory for which they can demand a premium price from~~  
5 ~~well-capitalized advertisers, which receive guaranteed ad space in return. Similarly with PMP,~~  
6 ~~the participants are large enterprise advertisers and marketers, and only a handful of large~~  
7 ~~advertisers (e.g., Nike, Barclays) are invited to bid on a publisher's inventory. PMP is typically~~  
8 ~~offered by publishers with premium, expensive inventory, such as major media sites like *Forbes*,~~  
9 ~~the *Wall Street Journal*, or the *New York Times*.~~

9 202. ~~For small and medium-sized advertisers, it is essentially impossible to access~~  
10 ~~such exclusive inventory directly—not only are they not invited by the publisher, but even if they~~  
11 ~~were, they could not pay the high prices set by the publisher. Together, private invite-only~~  
12 ~~auctions and direct purchase are so exclusive that they account for a very low percentage of the~~  
13 ~~display advertising market, and they are no substitute for real-time bidding on the open web.~~

14 203. ~~In fact, Google often is involved in these limited invite-only and premium ad-~~  
15 ~~buying processes where they occur. Google offers these options for transacting in Display &~~  
16 ~~Video 360 (reserved for enterprise advertising customers), and DoubleClick Ad Exchange offers~~  
17 ~~services to facilitate invite-only exchanges. As such, despite these processes' "private" label,~~  
18 ~~Google's participation is frequently still required to complete the underlying transactions.~~

19 204. ~~Online display advertising is not substitutable with traditional forms of~~  
20 ~~advertising, such as print, television, radio, or billboard advertisements. None of those platforms~~  
21 ~~rely on individual targeting based on individual user data and profiles—the entire driver of~~  
22 ~~programmatic or automated display advertising. Recent pricing and bid data from various~~  
23 ~~exchanges illustrate the point. For example, a 2018 Google study reported that the prices for ad~~  
24 ~~space trading on Google's exchange drop by half or more when advertisers cannot identify users~~  
~~associated with the ad space for sale. Relatedly, according to Index Exchange, the number of~~  
~~bids for ad space on Mozilla Firefox pages declined by 38% after that internet browser started~~

Formatted: Font: Not Italic

Formatted: Font: Not Italic

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

blocking cookies. In short, unless they can know the identity of the users being targeted, advertisers often avoid ad auctions altogether.

205. — Regardless of whether certain traditional forms of advertising may be reasonably interchangeable for each other, digital advertising is not. Digital advertising is different in kind from traditional forms of advertising, including because it reaches targeted customers individually and because digital advertisements can be continuously updated and improved based on data showing how consumers are responding.

206. — With the broad category of digital advertising, display advertising is not reasonably interchangeable with search advertising. These two forms of digital advertising perform different roles, serve different purposes in marketing campaigns, and are treated by advertisers and marketing firms as distinct. Search is intent-based advertising that seeks to induce consumers who have already shown an interest in buying a product or service to make a purchase. Display, in contrast, is suitable for raising awareness about a product, service, or brand and reaching new audiences that may not yet have shown an interest. Because of this basic difference in how the two forms of advertising function in relation to potential customers, they are not reasonable substitutes for each other.

207. — During the class period, display advertising also performed a unique function in advertisers' re-marketing campaigns. When a user visited a website selling goods or services, or clicked on a certain online advertisement, a "cookie" (or small file) capturing that user's action would be stored on their browser. Then, as the user continued to browse the web, the cookie enabled the placement of display advertisements on other websites from the company whose website the user had visited or on whose advertisement the user had clicked. Numerous class members, including Plaintiffs Prana Pets and Hanson Law Firm, relied on display advertising brokered by Google to carry out such re-marketing aiming to increase user "conversion" into paying clients or customers. These campaigns also resulted in the placement of display advertisements to users who carried a similar "cookie" profile as users who visited the advertiser's website and/or clicked on its advertisement. Search advertising cannot

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 accomplish this re-marketing given that the purpose of this strategy is to target a discrete set of  
2 users with display advertising.

3 208. The government enforcers note in their complaint that display advertising, in  
4 contrast to search advertising, does “not enable advertisers to target customers based on specific  
5 queries and are generally aimed at consumers who are further from the point of purchase.” The  
6 enforcers’ complaint also quotes the statement of Google’s Chief Economist that “[o]ne way to  
7 think about the difference between search and display/brand advertising is to say that ‘search ads  
8 help satisfy demand’ while ‘brand advertising helps to create demand,’” and “[d]isplay and  
9 search advertising are complementary tools, not competing ones.” Thus, given that search and  
10 display advertising, by Google’s own admission, do not compete for the same business, they  
11 occupy distinct antitrust markets.

12 209. Additionally, the market for display advertising services is separate and distinct  
13 from the market for advertisement inventory — i.e., the spaces on websites that publishers make  
14 available for advertisers to purchase. At least thousands of companies act as publishers with  
15 display advertisement inventory, but in general, these companies do not offer the services that  
16 facilitate placement of advertisements into the supply of display advertising space. Only a few  
17 companies — Google chief among them — now provide display advertising services.

18 210. There are high barriers to entry for the display advertising market and its  
19 component submarkets. Entering any of these markets requires a substantial investment to  
20 develop and implement the technology necessary to compete. Consequently, “advertisers and  
21 publishers alike have few options when deciding how to buy and sell online ad space,”  
22 concludes the 2020 House Subcommittee report on competition in digital markets.

23 211. Google’s overall conduct, including leveraging its internet search platform  
24 dominance and denying interoperability in several respects, as described above, has made it  
exponentially more difficult for would-be market participants to effectively enter these markets  
and compete with Google. Google has used its market dominance to ensure that market entry  
by would-be competitors is infeasible. And Google’s conduct, moreover, has made it

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

1 impractical for existing market participants to compete—which has resulted in large numbers of  
 2 companies exiting the relevant market.

3 212. ~~Programmatic display advertising—the subject of this action—serves a different~~  
 4 ~~purpose and is not reasonably interchangeable with social media display advertising. Google’s~~  
 5 ~~automated display advertising services connect independent entities—advertisers and~~  
 6 ~~publishers. In other words, advertisers use display advertising services to access a range of~~  
 7 ~~publication options and thereby reach a broader group of users. Publishers, in turn, use display~~  
 8 ~~advertising services to access many potential advertisers. Google operates in an open-ended~~  
 9 ~~market in which it facilitates the transactions between these advertisers and publishers.~~

10 213. ~~By contrast, companies like Facebook, Twitter, and Snapchat primarily host~~  
 11 ~~social media content, while Amazon primarily operates an online market for goods. These web~~  
 12 ~~businesses are suppliers of their own ad inventory and have close-ended, in-house display~~  
 13 ~~advertising systems that they use to publish advertisements on their own sites. Those services~~  
 14 ~~are not available to other publishers, and advertisements that appear on these close-ended~~  
 15 ~~websites only reach visitors to those websites. To advertise across the open web—rather than,~~  
 16 ~~for example, on Facebook or Amazon specifically—an advertiser must engage with the ad tech~~  
 17 ~~stack that Google dominates.~~

18 214. ~~As the House Subcommittee report explains:~~

19 ~~Within display advertising there are two separate “ad tech” markets~~  
 20 ~~— . . . first-party and third-party. “First-party” platforms refer to~~  
 21 ~~companies such as Facebook, Twitter, and Snap which sell ad space~~  
 22 ~~on their own platforms directly to advertisers. . . . Third-party~~  
 23 ~~display ad tech platforms are run by intermediary vendors and~~  
 24 ~~facilitate the transaction between third-party advertisers, such as the~~  
 25 ~~local dry cleaner or a Fortune 500 company, and third-party~~  
 26 ~~publishers, such as *The Washington Post* or a blog.~~

27 216. ~~The close-ended advertising services offered by Facebook, Amazon, Twitter, and~~  
 28 ~~Snapchat (among other web businesses) are not, therefore, reasonable substitutes for the open-~~  
 29 ~~ended system Google offers and do not compete for the same business. “Programmatic” CPM~~

ads are thus distinguished from “social media” CPM ads among participants in the digital advertising industry.

#### ~~VIII. ANTITRUST IMPACT~~

217. ~~Google’s conduct set forth herein had the purpose and effect of excluding competition in the relevant market. Absent Google’s conduct, each segment of the display advertising market would have been significantly more competitive and class members would have financially benefited from that increased competition.~~

218. ~~Google’s monopoly conduct has caused ongoing and durable harm to competition in the display advertising market. Google’s monopoly power has enabled it to raise its prices above the competitive level to advertisers and, in turn, pay lower than competitive prices to publishers. Google has extracted monopoly rents in the form of fees it does not fairly disclose to other market participants.~~

219. ~~A competitive market would have benefited both the advertisers and the publishers that use display advertising services. Firms that provide display advertising services make money in a variety of ways, including by retaining the difference between (1) what an advertiser pays the provider to place ads, and (2) the portion of that payment that the provider remits to a publisher for placing the ads on its website. In a competitive market, advertisers would have paid less to have their ads placed, and publishers would have received more for placing the ads on their websites.~~

220. ~~With Google stifling competition and extracting monopoly rents as the dominant intermediary, both advertisers and publishers lost money. The antitrust economist Fiona Scott Morton noted that, (and lose) money. The absence of competition that has resulted from Google’s conduct has caused Plaintiffs and class members to lose money or property because they have been required to pay more than they otherwise would have paid for digital display advertisements.~~

Formatted: Font: Times New Roman

Formatted: Heading 1, Indent: Left: 0.5"

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Right: 0", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

~~[i]f advertisers had more choices in the but-for world about where and through whom to place their ads, they would not continue to give their business to Google in the face of an overcharge. Google would have to choose between losing advertisers' business to rivals whose auctions were fair, or adopting an auction design that generated competitive (lower) prices for advertisers.~~

~~322. In sum, the marked decrease in competition that has resulted from Google's conduct has caused economic injury to Plaintiffs and class members because advertisers have paid more than they otherwise would have paid, and publishers have been paid less than they otherwise would have been paid.~~

#### ~~VIII~~IX. **TOLLING OF THE STATUTE OF LIMITATIONS**

##### **A. Google's Conduct Constitutes Continuing Violations of the Antitrust Laws and Tolls the Statute of Limitations.**

~~321. The advertiser plaintiffs initiated suit on May 27, 2020. With respect to all of the conduct giving rise to Plaintiffs' claims and for each category of conduct described, Google's conduct continued into and throughout the limitations period. Each time Google manipulated the auction for display advertising on the sale of impressions to advertisers, it committed an overt act continuing the illegal conduct.~~

~~322. Each of the categories of injurious conduct continued at least through 2019, including Dynamic Allocation, Enhanced Dynamic Allocation, Dynamic Revenue Sharing, Projects Bernanke, Poirot and Elmo, Unified Pricing Rules, redaction of auction data, limitations on publisher line items and Reserve Price Optimization. Google carried out overt acts within the limitations period in furtherance of each of these categories of its scheme to monopolize the relevant markets.~~

~~323. Moreover, even if some conduct occurred prior to the limitations period, Google's conduct should not be assessed piecemeal. The injury caused by Google's acts outside the period were continued and exacerbated by Google's acts within the limitations period.~~

Formatted: Font: Times New Roman

Formatted: Heading 1, Indent: Left: 0.5"

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

**A.B. The Statutes of Limitations Did Not Begin to Run Because Plaintiffs Did Not and Could Not Discover Their Claims.**

324. To the extent certain of Google's anticompetitive acts occurred before the applicable limitation periods, not until the announcement of governmental investigations into Google's monopolization of the relevant markets could Plaintiffs have discovered their antitrust injuries and causes of action set forth in this Complaint. At the time it occurred, no reasonable class member had any basis to discern the anticompetitive nature of Google's conduct described in this Complaint that occurred before the applicable limitations periods.

223. Plaintiffs and class members had no actual or constructive knowledge of Google's anticompetitive conduct, or of facts sufficient to place them on inquiry notice of the claims asserted herein, during the class period and continuing thereafter.

224. ~~As described herein,~~ Plaintiffs and class members suffered antitrust injury in the form of economic losses as a result of Google's anticompetitive conduct and wrongful exercise of monopoly and market power in the relevant ~~market. Other markets.~~ But, ~~other~~ than dealing directly with Google when using its digital advertising services, Plaintiffs had no direct contact ~~or interaction~~ with Google and no means from which they could have discovered these injuries and the other bases for their causes of action set forth in this ~~complaint.~~

225. ~~Throughout Complaint. Until 2019 at the class period, and continuing thereafter earliest,~~ there was no information in the public domain sufficient to put Plaintiffs on notice that Google had wrongfully acquired ~~a display advertising monopoly monopolies in the relevant markets~~ or was using its monopoly and market power to charge advertisers supra-competitive prices for display advertising ~~and to pay sub-competitive prices to publishers of such advertising.~~

226-325. . It was reasonable for Plaintiffs and class members not to suspect that Google was engaging in any unlawful and injurious anticompetitive behavior.

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Font color: Black

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"



227. While certain of Google's anticompetitive acts occurred before the applicable limitations periods, not until recently, with Thus, under the discovery rule, because Plaintiffs could not have discovered that they suffered antitrust injury as a result of Google's conduct until the announcement of governmental investigations into Google's monopolization of the market for intermediation services in the online display advertising market, could Plaintiffs have discovered their antitrust injuries and causes of action set forth in this complaint. At the time it occurred, no reasonable class member had any basis to discern the anticompetitive nature of Google's conduct described in this complaint that occurred before the applicable limitations periods.

228. Plaintiffs allege a continuing course of unlawful conduct by Google, including conduct within the applicable limitations periods. That conduct has inflicted continuing and accumulating harm to Plaintiffs and class members within the applicable statutes of limitations.

229. For these reasons, the statutes of limitations applicable to markets, Plaintiffs' and class members' claims have been tolled with respect to the claims asserted herein, arising out of conduct that began before the limitations period, did not accrue until 2019 at the earliest and are timely.

#### **B.C. Google's Fraudulent Concealment Tolled the Statute of Limitations**

230. Additionally or alternatively, application of the doctrine of fraudulent concealment tolled the statutes of limitations on Plaintiffs' claims. Plaintiffs had no because they did not have actual or constructive knowledge of Google's wrongful acquisition and maintenance of its of monopoly and market power in the relevant market markets, or of facts sufficient to place them on inquiry notice of their injuries or the other bases for their causes of action, during the class period and continuing thereafter. No information in the public domain or otherwise available to Plaintiffs during the class period suggested that Google had wrongfully acquired a digital advertising monopoly or was using its monopoly and market power to charge

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Font color: Black

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

advertisers supra-competitive prices for display advertising ~~and to pay sub-competitive prices to publishers of such advertising.~~

328. Google ~~concealed~~ took steps to conceal its illicit and harmful conduct, both by failing to disclose its wrongful acquisition and maintenance of ~~a digital advertising~~ monopoly ~~and market power~~ through exclusionary acts in the relevant ~~market~~ markets, and by affirmatively denying that it was engaged in such conduct.

329. Google made false statements and misrepresentations to advertisers and publishers about the nature of much of the conduct described above, including Dynamic Allocation, Enhanced Dynamic Allocation, Dynamic Revenue Sharing, Reserve Price Optimization, and Unified Pricing Rules. Google kept secret and/or failed to reveal the true nature and impact of its auction-rigging programs, including Projects Bernanke, Poirot, and Elmo.

330. Google misled advertisers (and publishers) into believing its ad exchange AdX was running a true second-price auction while hiding from them that it was using various tools to manipulate the auctions. Google hid Dynamic Revenue Sharing from advertisers and publishers, misleading them into believing AdX was running as a second-price auction when, in fact, Google was manipulating the price floors. Google internally acknowledged that Dynamic Revenue Sharing “makes the auction untruthful” but did not reveal this publicly. Similarly, as a further example, Google falsely stated that its AdX Exchange was running a second-price auction when Project Bernanke worked to secretly drop the second-highest bid from the auction and allow Google to pay the publisher the third-highest bid and privately retain the difference.

331. In addition to misrepresenting and concealing the true nature of its auction-rigging programs, Google has (repeatedly) publicly denied allegations by ~~American~~ U.S.

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

and foreign regulators that it has abused its power in digital advertising markets.- These affirmative statements, and Google’s nondisclosure that it had acted to forestall competition, served to fraudulently conceal Google’s unlawful monopoly in ~~brokering online display advertising the relevant markets.~~

~~232,332.~~ When the French Competition Authority fined Google \$167 million in late 2019, Google publicly defended its advertising policies in a statement issued on December 20, 2019, as purportedly needed to “protect ~~[-]~~ [people] from exploitative and abusive ads.”- In fact, as discussed above, Google adopted those policies to protect its monopoly power by heading off competition. -Similarly, in response to news reports in 2019 that federal and state officials had opened antitrust investigations into Google’s advertising business, a Google vice-president for product management, Sissie Hsiao, released a public statement on September 11, 2019, asserting that “[c]ompetition is flourishing, and publishers and marketers have enormous choice” when that was false. By October 2021, Google had paid France \$270 million in fines for abusing its dominance in the ad-tech stack—French officials explained that Google’s “very serious practices penalized competition” in online advertising and Google had been “rightly punished.”

333. Google continues to make false statements as to the competitive nature of its advertising products. For example, in response to a new probe announced by European Union competition officials on June 22, 2021 regarding whether Google’s services show an “apparent favouring of Google’s ad exchange ‘AdX’ by DV360 and/or Google Ads and the potential favouring of DV360 and/or Google Ads by AdX,” Google said in a statement that thousands of companies in Europe use its advertising products each day and that “[t]hey choose them because they’re competitive and effective.” Those statements are false. Google’s advertising products are not competitive but, rather, priced at artificially high monopoly levels.

Formatted: Default Paragraph Font

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

334. Additionally, Google's internal messaging, as noted by DOJ, demonstrates its executives' awareness that Google has used its monopoly power to restrain competition and highlights their efforts to conceal these antitrust violations: "Google employees were instructed to avoid using terms such as 'bundle,' 'tie,' 'crush,' 'kill,' 'hurt,' or 'block' competition, and to avoid observing that Google has 'market power' in any market."

335. Due to Google's nondisclosure and fraudulent concealment of its exclusionary acts in the relevant markets, Plaintiffs could not have detected Google's anticompetitive conduct until various governmental investigations into Google's monopolization of the relevant markets in the display advertising were made public in 2019.

336. Considered together, Google's failure to disclose it had gained a monopoly through exclusionary acts in the relevant markets, in addition to Google's affirmative denials that it engaged in such conduct, tolls Plaintiffs' claims based on fraudulent concealment given that there was no public information available to Plaintiffs during the class period that reasonably would have put Plaintiffs on notice of Google's anticompetitive conduct.

337. In addition to its affirmative fraud and nondisclosure, Google's anticompetitive conduct also was inherently self-concealing because revealing the true facts concerning Google's monopolistic behavior would have prompted governmental enforcement activity and/or class action litigation. Digital advertising is subject to antitrust regulation, so it was reasonable for Plaintiffs and class members not to suspect that digital advertising services were being sold in a noncompetitive market. A reasonable person under the circumstances would not have had occasion to suspect Google was brokering display advertising at supra-competitive prices (for advertisers) and sub-competitive prices (for publishers) at any time during the class period.

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

~~234.~~ Because Google's antitrust violations were self-concealing and affirmatively concealed by Google, Plaintiffs and class members had no knowledge of Google's antitrust violations or of ~~any~~ facts or information that would have caused a reasonably diligent person to suspect Google of having wrongfully acquired and maintained monopoly and market power during the class period.

~~235,338.~~ Therefore, by operation of Google's fraudulent concealment, the statutes of limitations applicable to Plaintiffs' and class members' claims were tolled throughout the class period.

#### ~~IX.X.~~ CLASS ACTION ALLEGATIONS

~~236,339.~~ Plaintiffs bring this action on behalf of themselves and, ~~under Federal Rules of Civil Procedure 23(a), (b)(2), (b)(3) and/or (c)(4),~~ as representatives of the following class:

All persons and entities in the United States that, from January 1, 2016 to the present, ~~used Google's~~ placed a display advertising services to (1) place an ad on a website or mobile application operated by another entity (advertisers) or (2) place an ad from a third party on their own website (publishers) via a transaction in which the impression was sold, brokered, exchanged or auctioned by Google.

Excluded from the ~~proposed~~ class are: Defendants, their employees, co-conspirators, officers, directors, legal representatives, heirs, successors and wholly or partly owned subsidiaries or affiliated companies; class counsel and their employees; and the judicial officers and their immediate family members and court staff assigned to this case.

~~239,340.~~ The ~~proposed~~ class meets the requirements of Federal Rules of Civil Procedure 23(a), (b)(1), (b)(2), and ~~or~~ (b)(3).

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Font: Times New Roman

**Formatted:** Heading 1, Indent: Left: 0.5"

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Normal

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

240:341. The members of the class are so numerous that joinder is impracticable.

The class includes at least hundreds of thousands of members that are widely dispersed throughout the country.

241:342. Plaintiffs' claims are typical of the claims of all class members. Plaintiffs' claims arise out of a common course of conduct that gives rise to the claims of all other class members. Plaintiffs and all class members were and will continue to be damaged in the same manner by the same wrongful conduct, namely Google's unfair business practices, agreements in restraint of trade, and illegal monopolization of ~~the market for~~ display advertising services markets.

242:343. Plaintiffs will fairly and adequately protect and represent the interests of the class. Plaintiffs' interests are coincident with, and not antagonistic to, those of the class.

243:344. Plaintiffs are represented by counsel who are experienced and competent in the prosecution of class action litigation and have particular expertise with antitrust litigation.

244:345. Numerous questions of law or fact common to the class arise from Google's course of conduct to exclude competition in the relevant ~~market~~markets, including:

a. Whether Google holds monopoly or market power in the relevant ~~market~~markets;

b. Whether Google unlawfully acquired and maintained monopoly or market power in the relevant ~~market~~markets;

c. Whether the NBA between Google and Meta unreasonably restrains trade in the Final Clearinghouse Auction run by Google or in any relevant market;

**Formatted:** List Paragraph, Indent: Hanging: 0.5", Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 1.25" + Indent at: 1.5"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

d. Whether Google's Unified Pricing Rules and capping of publisher line items unreasonably restrain trade in any relevant market through combinations with publishers;

e. Whether Google engaged in unfair ~~business or deceptive acts or~~ practices that reduced competition in the relevant market conduct of trade;

f. The form and content of injunctive relief to restore competition; and

g. The amount of damages owed the class as a result of Google's illegal activity.

**Formatted:** List Paragraph, Indent: Hanging: 0.5", Numbered + Level: 1 + Numbering Style: a, b, c, ... + Start at: 1 + Alignment: Left + Aligned at: 1.25" + Indent at: 1.5"

245:346. Questions of law and fact common to members of the class will predominate over any questions that may affect only individual class members because Google acted on grounds generally applicable to the class as a whole. For the same reason, class certification for purposes of adjudicating Plaintiffs' claims for injunctive and corresponding declaratory relief is appropriate.

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

246:347. This class action is superior to other alternatives for the fair and efficient adjudication of ~~this controversy. Prosecuting the claims pleaded herein~~ the Advertisers' causes of action. Prosecution of this lawsuit as a class action will eliminate the possibility of repetitive litigation. There will be no material difficulty in the management of this action as a class action.

247:348. The prosecution of separate actions by individual class members would create the risk of inconsistent or varying adjudications, establishing incompatible standards of conduct for Google.

248:349. Plaintiffs reserve the right to amend the class definition and to seek class certification with respect to common issues, including issues related to market definition, monopoly or market power, or Google's duties or conduct.

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

~~X~~**XI. CAUSES OF ACTION**

**FIRST CAUSE OF ACTION**  
**VIOLATIONS OF THE SHERMAN ANTITRUST ACT**  
**Monopolization**  
**15 U.S.C. § 2**

~~249,350.~~ Plaintiffs incorporate the allegations set forth above as if fully set forth ~~herein~~here.

~~351.~~ Plaintiffs assert this cause of action against Google.

~~250,352.~~ The ~~market~~U.S. markets for ~~programmatic display advertising services in~~ the United States is ~~and~~ exchanges and for ad-buying tools for small advertisers are relevant antitrust ~~market~~markets, and Google ~~has~~holds monopoly power in ~~that market~~each of these markets.

~~251,353.~~ Google wrongfully acquired and unlawfully maintained monopoly power in ~~the relevant market~~these markets through the ~~overall scheme and~~conduct alleged herein, including by ~~leveraging its monopoly power in the online search~~(a) impeding competition between exchanges and other markets to coerce the purchaseadvantaging its exchange through processes codenamed Dynamic Allocation and use of its display advertising services (an unlawful tying arrangement), acquiring rivals, denying interoperability on several technological fronts, restricting competing firms' access to information, and riggingEnhanced Dynamic Allocation; (b) manipulating exchange auctions that it controlled to its own advantagethrough secret programs codenamed Dynamic Revenue Sharing and Project Bernanke (and its variants); (c) engaging in a scheme to "kill" header bidding by diverting ad spend away from rival exchanges that permitted header bidding, including through the processes codenamed Projects Poirot and Elmo; and (d) imposing floor-price parity through Unified Pricing Rules.

**Formatted:** Font: Times New Roman

**Formatted:** Heading 1, Indent: Left: 0.5"

**Formatted:** Font: Times New Roman

**Formatted:** Space After: 0 pt, Widow/Orphan control, Don't keep with next, Don't keep lines together, Adjust space between Latin and Asian text, Adjust space between Asian text and numbers

**Formatted:** Font: Times New Roman

**Formatted:** Space After: 10 pt, Widow/Orphan control, Don't keep with next, Don't keep lines together, Adjust space between Latin and Asian text, Adjust space between Asian text and numbers

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"



252.354. Google's actions were carried out willfully and with the ~~specific~~ intent to acquire and maintain monopoly power in the ~~relevant market~~ markets for ad exchanges and for ad-buying tools for small advertisers through anticompetitive conduct and not through a superior product, business acumen, or a historic accident. There is no legitimate procompetitive justification for Google's anticompetitive conduct, and even if there were, less restrictive alternatives to achieve it would exist.

253. ~~Google's exclusionary conduct has foreclosed a substantial share of the market for programmatic display advertising services.~~

254.355. As a direct and proximate cause of Google's conduct, Plaintiffs and members of the class have suffered antitrust injury in the form of economic losses. Those losses constitute antitrust injury, as they are an injury of the type the antitrust laws were intended to prevent and that flows from what makes Google's monopolistic acts unlawful. But for Google's ~~unlawful~~ exclusionary conduct, competition would have prevailed in the relevant ~~market~~ markets and Plaintiffs and class members would not have sustained these losses. Google's conduct also deprived Plaintiffs and class members of improved quality and innovation in the relevant ~~market~~ markets.

255. ~~There is no legitimate pro-competitive justification for Google's anticompetitive conduct, and even if there were, less restrictive alternatives to achieve it would exist.~~

256.356. Plaintiffs and ~~class~~ members of the class are entitled to seek equitable relief as appropriate to halt Google's monopoly conduct and restore competition in the relevant ~~market. Members of the class are regular users of display advertising services and will continue to purchase such services and suffer further injury if Google's monopoly is not ended.~~ markets.

The primary purpose and effect of such injunctive relief will be to benefit the public from the

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

lower prices and greater innovation that will prevail in competitive digital advertising markets in the absence of Google's ~~monopoly~~ monopolies.

~~257,357.~~ Plaintiffs and class members ~~of the class~~ are entitled to damages, including treble damages, sustained as a result of Google's monopolistic acts and practices under 15 U.S.C. § 15.

~~SECOND CAUSE OF ACTION~~  
~~SECOND CAUSE OF ACTION~~  
**VIOLATIONS OF THE UNFAIR COMPETITION LAW**  
**Attempted Monopolization**  
**15 U.S.C. § 2**

~~258,358.~~ ~~Cal. Bus. & Prof. Code § 17200 et seq. (UCL)~~ Plaintiffs incorporate the allegations set forth above as if fully set forth ~~herein~~ here.

359. Plaintiffs assert this cause of action against Google.

360. The U.S. markets for ad exchanges, ad-buying tools for small advertisers, and ad-buying tools for large advertisers are relevant antitrust markets. Google has monopoly power, or there is dangerous probability that Google will acquire monopoly power, in these markets.

361. Google willfully, knowingly, and with specific intent to do so, attempted to monopolize these markets through the conduct alleged herein, including by (a) impeding competition between exchanges and advantaging its exchange through processes codenamed Dynamic Allocation and Enhanced Dynamic Allocation; (b) manipulating exchange auctions through secret programs codenamed Dynamic Revenue Sharing and Project Bernanke (and its variants); (c) engaging in a scheme to "kill" header bidding by diverting ad spend away from rival exchanges that permitted header bidding, including through the processes codenamed Projects Poirot and Elmo; and (d) imposing floor-price parity through Unified Pricing Rules.

Formatted: Font: Times New Roman

Formatted: Font: Times New Roman

Formatted: List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56", Don't keep with next, Don't keep lines together

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

362. As a direct and proximate cause of Google's conduct, Plaintiffs and members of the class have suffered antitrust injury in the form of economic losses. Those losses constitute antitrust injury, as they are an injury of the type the antitrust laws were intended to prevent and that flows from what makes Google's attempted monopolization unlawful. But for Google's exclusionary conduct, competition would have prevailed in the relevant markets and Plaintiffs and class members would not have sustained these losses. Google's conduct also deprived Plaintiffs and class members of improved quality and innovation in the relevant markets.

363. There is no legitimate procompetitive justification for Google's anticompetitive conduct, and even if there were, less restrictive alternatives to achieve it would exist.

364. Plaintiffs and class members are entitled to damages, including treble damages, sustained as a result of Google's attempted monopolization under 15 U.S.C. § 15.

**THIRD CAUSE OF ACTION**  
**Contract or Combination in Restraint of Trade**  
**15 U.S.C. § 1**

365. Plaintiffs incorporate the allegations set forth above as if fully set forth here.

366. Plaintiffs assert this cause of action against Google and Meta.

367. The relevant market for the purposes of this cause of action is the market for web and in-app display space sold at auction in Final Clearinghouse Auctions run by Google.

368. The NBA between Google and Meta constitutes a contract, combination, or conspiracy that unreasonably restrains trade or commerce in auction market for web and in-app display space by providing Meta with superior information regarding publishers' and developers' bid requests that Google withholds from other bidders in its auctions.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

369. The NBA places advertisers who bid in Google's Final Clearinghouse Auctions, but who do not bid through Meta's MAN intermediary, at a competitive disadvantage and renders them worse off than they would be in the absence of the NBA.

370. Defendants' unreasonable agreement restraining trade has caused injury in fact and antitrust injury to Plaintiffs and class members by forcing them to place supra-competitive bids to win auctions against Meta's advertising customers for open display web and in-app inventory. Defendants' conduct restrained trade in the market in which Plaintiffs and class members made their purchases. In paying anticompetitive overcharges as a result of Defendants' conduct, Plaintiffs and class members suffered an injury of a type which the antitrust laws were designed to redress.

371. Defendants' agreement constitutes a violation of Section 1 of the Sherman Act, 15 U.S.C. § 1, and the anticompetitive consequences of the agreement far exceed any putative procompetitive effect.

372. Plaintiffs and class members are entitled to treble damages under 15 U.S.C. § 15.

**FOURTH CAUSE OF ACTION**  
**Unlawful Trust**  
**Cal. Bus. & Prof. Code § 16720 et seq.**

373. Plaintiffs incorporate the allegations set forth above as if fully set forth here.

374. Plaintiffs assert this cause of action against Google and Meta.

375. Google and Meta through their NBA entered into a continuing combination of capital, skill or acts to unreasonably restrict trade or commerce in violation of the Cartwright Act, California Business and Professions Code § 16720 et seq., by preventing competition in the market for web and in-app display space sold at auction in Final Clearinghouse Auctions run by Google. Among other violations, Google and Meta agreed to pool, combine or directly or

Formatted: Font: Times New Roman

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

indirectly unite their interests connected with the transacting of bids on such auctions, and in doing so artificially affected the pricing of the bids. The anticompetitive consequences of the NBA far exceed any putative procompetitive effect.

376. The NBA places advertisers who bid in Google's Final Clearinghouse Auctions, but who do not bid through Meta's MAN intermediary, at a competitive disadvantage and renders them worse off than they would be in the absence of the NBA. Defendants' unlawful agreement caused injury in fact and antitrust injury to Plaintiffs and class members by forcing them to place supra-competitive bids to win auctions against Meta's advertising customers for open display web and in-app inventory. Defendants' conduct restrained trade in the market in which Plaintiffs and class members made their purchases. In paying anticompetitive overcharges as a result of Defendants' conduct, Plaintiffs and class members suffered an injury of a type which the antitrust laws were designed to redress.

377. Plaintiffs and class members are entitled to treble damages under California Business and Professions Code § 16750.

**FIFTH CAUSE OF ACTION**  
**Contracts or Combinations in Restraint of Trade**  
**15 U.S.C. § 1**

378. Plaintiffs incorporate the allegations set forth above as if fully set forth here.

379. Plaintiffs assert this cause of action against Google.

380. The relevant markets for purposes of this cause of action are the U.S. markets for ad exchanges, ad-buying tools for small advertisers, and ad-buying tools for large advertisers.

381. Through a series of agreements imposed on publishers, Google has unreasonably restrained trade and foreclosed competition in this market, in violation of Section 1 of the

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

Sherman Act, 15 U.S.C. § 1. The anticompetitive consequences of these restraints far exceed any putative procompetitive effect.

382. Historically, publishers set different price floors on different exchanges, fostering competition between Google and non-Google exchanges and ad tech tools. Google’s “Unified Pricing Rules”—introduced with the 2019 revision of Google Ad Manager’s pricing rules—ended that competition. Discounts and other deals that could pit Google against its rivals were foreclosed by these restrictions, resulting in artificially higher prices borne by advertisers.

383. Under Unified Pricing, Google precludes publishers from setting different price floors for different exchanges and ad-buying tools. Google imposes these price-fixing terms on publishers as a condition on their continued use of Google’s monopoly ad server and by exercising its discretion under its agreements with publishers. Participating publishers agreed and assented to the change by continuing to use DFP. Google’s written agreements for DFP customers also provide, explicitly or implicitly, that the publisher agrees to Google’s rules and restrictions applicable to DFP.

384. Google prohibits publishers from setting different threshold bids on competing exchanges or giving different advertisers different prices than publishers give Google and buyers on its properties. Among other effects, these restrictions have prevented publishers from routing their ad space to another exchange at a price floor lower than the floor given to Google’s exchange, or from giving one bidder a lower price floor than another bidder.

385. Google’s unlawful agreements also impose a 5 to 10 percent fee for transactions that clear on other exchanges. Google thereby both profits on trades outside its system and handicaps the competition that clears those trades. Thus, the tax imposed by Unified Pricing restrains competition by inducing transactions on Google’s exchange.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

386. Each publisher that accepted Unified Pricing Rules knew that other publishers were also accepting these rules, as the change was imposed across Google's electronic systems. Publishers also knew that the Unified Pricing Rules were suboptimal for their bottom line and likely to increase Google's share of the relevant markets.

387. Publishers were coerced to accept and acquiesced to Google's Unified Pricing Rules, which have reduced competition among exchanges. These price-fixing agreements imposed upon publishers, compounded by the fees that Google imposes for transactions that occur off its exchange, impede the ability of competing exchanges to deliver impressions at lower prices. Advertisers were harmed because the higher volume of commerce on Google's exchange that resulted from these restraints reduced their choices in the ad-buying tool and exchange markets and caused them to pay higher prices to place ads through Google.

388. Google also imposed restrictive agreements on publishers that capped the number of line items they could use on header bidding. Publishers were coerced to accept and acquiesced to these restrictions, which Google presented as a condition of continuing to use its monopoly ad server. Each publisher that accepted Google's line-item restrictions knew that other publishers were also accepting these rules, and publishers also knew that the restrictions would damage their bottom line and likely increase Google's share of the exchange market.

389. The restriction on line items constrained publishers' participation in header bidding, and as a result, a substantial percentage of auction transactions for ad impressions shifted to Google's Exchange Bidding (later re-named Open Bidding). Fewer line items cause publishers' bids from header bidding exchanges to be rounded down more often. As a result, the bids from header-bidding exchanges are less competitive compared to the bids from Google's— which also do not trigger an additional fee. Advertisers were harmed because the higher volume

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

of commerce on Google's exchange that resulted from Google's line-item restraint reduced their choices in the ad-buying tool and exchange markets and caused them to pay higher prices to place ads through Google.

390. The combinations and agreements between Google and its publisher customers violate Section 1 of the Sherman Act, and caused Plaintiffs and class members to pay anticompetitive overcharges, an injury of a type which the antitrust laws were designed to redress. Plaintiffs and class members thus have been injured in their business or property and are entitled to treble damages under 15 U.S.C. § 15.

**SIXTH CAUSE OF ACTION**  
**Unlawful Trusts**  
**Cal. Bus. & Prof. Code § 16720 et seq.**

391. Plaintiffs incorporate the allegations set forth above as if fully set forth here.

392. Plaintiffs assert this cause of action against Google.

393. Google entered into continuing combinations of capital, skill or acts with publishers to unreasonably restrict trade or commerce in the U.S. markets for ad exchanges, ad-buying tools for small advertisers, and ad-buying tools for large advertisers. These trusts violate the Cartwright Act, California Business and Professions Code § 16720 et seq., for the reasons set forth in the Fifth Cause of Action above, and their anticompetitive consequences far exceed any putative procompetitive effect.

394. The aforementioned combinations and agreements between Google and its publisher customers caused Plaintiffs and class members to pay anticompetitive overcharges, an injury of a type which the antitrust laws were designed to redress. Plaintiffs and class members thus have been injured in their business or property and are entitled to treble damages under California Business and Professions Code § 16750.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"



**SEVENTH CAUSE OF ACTION**  
**Unfair or Deceptive Acts or Practices**

259. — Cal. Bus. & Prof. Code § 17200 et seq. Google's conduct is unlawful in violation of the UCL because it violates the Sherman Antitrust Act, 15 U.S.C. § 2.

260. — Google has engaged in unfair business practices through the overall scheme and conduct alleged herein, which has restrained competition. Google's conduct is unfair, in violation of the UCL, because it violates California's clearly established public policy forbidding monopolistic acts. Google wrongfully acquired and unlawfully maintained monopoly power in the relevant market through the conduct alleged herein, including by leveraging its monopoly power in the online search and other markets to coerce the purchase and use of its display advertising services (an unlawful tying arrangement), acquiring rivals, denying interoperability on several technological fronts, restricting competing firms' access to information, and rigging auctions that it controlled to its own advantage.

Google's practices also are unfair in violation of the UCL because

395. Plaintiffs incorporate the allegations set forth above as if fully set forth here.

396. Plaintiffs assert this cause of action against Google.

397. California's Unfair Competition Law ("UCL"), Cal. Bus. & Prof. Code § 17200, et seq., proscribes acts of unfair competition, including "any unlawful, unfair or fraudulent business act or practice and unfair, deceptive, untrue or misleading advertising."

398. Google has engaged in unlawful, unfair or fraudulent business acts or practices and unfair, deceptive, untrue or misleading advertising, causing direct and substantial harm to Plaintiffs and class members in the form of increased advertising costs and reduced efficacy of ad spending. Google's conduct violative of the UCL occurred in the U.S. markets for ad exchanges, ad-buying tools for small advertisers, and ad-buying tools for large advertisers.

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

399. Google has engaged in unlawful business practices, in violation of the UCL,

because its conduct alleged herein violates the Sherman Act, 15 U.S.C. §§ 1 and 2.

~~261-400.~~ Google's practices are unfair in violation of the UCL because, among

other things, they offend public policy; are immoral, unethical, oppressive, outrageous,

unscrupulous, and substantially injurious; and caused substantial harm, including from Google's

~~supra-competitive inflated~~ prices that advertisers paid ~~and Google's anticompetitive~~

~~underpayments to publishers,~~ that substantially outweighs ~~by a wide margin~~ any possible utility

from the practices.

401. Plaintiffs and class members reasonably expected Google's unlawful and

~~unfair~~ auctions to be fair and reasonable. Google violated the UCL by falsely representing to

advertisers that it was conducting fair and transparent ad auctions. At no point did Google

disclose the material fact that it was deploying its monopoly and market power across the ad

stack, as set forth above, to advantage itself in the display auction market and disadvantage

display advertisers who sought to use non-Google products and services.

~~262-402.~~ Google's unfair and deceptive business practices actually and proximately

caused Plaintiffs and class members to lose money or property. Google secretly implemented

deceptive practices that caused direct and substantial harm to advertisers who were forced to pay

higher ad rates, coerced into using Google's ad-buying tools, and deprived of the benefits of

competition in the markets for ad-buying tools and ad exchanges.

403. Among other deceptive and unlawful acts that injured advertisers, Google used

(a) Reserve Price Optimization to deceptively increase the amounts advertisers paid on AdX;

(b) Dynamic Revenue Sharing to secretly increase the publisher fees advertisers were required to

pay in AdX when an advertiser bit significantly above the publisher's floor; (c) Project

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

Bernanke, including the Bell and Global Bernanke variants, to manipulate ad auctions in order to give an unfair advantage to Google Ads and disadvantage advertisers using other ad-buying tools; (d) Projects Poirot and Elmo to disadvantage advertisers using DV360 to bid on non-Google exchanges that used Header Bidding; and (e) Unified Pricing Rules, which prevented publishers from setting different floors for advertisers using non-Google ad-buying tools, thereby foreclosing competition in the markets for ad-buying tools and ad exchanges, and in turn, causing advertisers to pay higher ad rates due to the elimination of competition.

263.404. Plaintiffs and class members lack an adequate remedy at law to redress certain conduct of Google that violates the unfair prong of the UCL. Through the practices described herein, Google suppressed competition in its incipency, violated well-established antitrust policies, and ~~significantly harmed and~~ threatened to destroy and actually destroyed competition in the relevant ~~market~~ markets.

264.405. Accordingly, on behalf of the class, Plaintiffs seek injunctive relief, restitution, and reasonable attorneys' fees, as well as any other relief the Court may deem just or proper. The primary purpose and effect of such injunctive relief will be to benefit the public from the lower prices and greater innovation that will prevail in competitive digital advertising markets in the absence of Google's monopoly.

#### ~~XL~~ XII. PRAYER FOR RELIEF

265.406. WHEREFORE, Plaintiffs, on behalf of themselves and the class defined herein, respectfully request that this Court:

A. Determine that this action may be maintained as a class action pursuant to Fed. R. Civ. P. 23(a), (b)(2), and (b)(3), direct that reasonable notice of this action be given to

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56", Don't keep with next, Don't keep lines together

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

the class, appoint Plaintiffs as named representatives of the class, and appoint the undersigned Plaintiffs' counsel as class counsel;

B. Enter judgment against Google and Meta and in favor of Plaintiffs and the class;

C. Enter injunctive relief to restore competition in the relevant ~~market and its constituent submarkets~~ markets;

D. Award damages, including treble damages, and/or restitution to the class in an amount to be determined at trial, plus interest in accordance with law;

E. Award Plaintiffs and the class their costs of suit, including reasonable attorneys' fees, as provided by law; and

F. Award such further and additional relief as is necessary to redress the harm caused by ~~Google's~~ the Defendants' unlawful conduct and ~~as~~ which the Court may deem just and proper under the circumstances.

#### ~~XII~~ XIII. DEMAND FOR JURY TRIAL

~~266-407.~~ Pursuant to Federal Rule of Civil Procedure 38, Plaintiffs demand a trial by jury on all matters so triable.

Dated: ~~December 4, 2020~~ October 5, 2022

Respectfully submitted,

By: /s/ Dena C. Sharp

Dena C. Sharp (State Bar No. 245869)  
Jordan Elias (State Bar No. 228731)  
Adam E. Polk (State Bar No. 273000)  
Scott M. Grzeneczyk (State Bar No. 279309)  
**GIRARD SHARP LLP**  
601 California Street, Suite 1400

**Formatted:** List Paragraph, Indent: Left: 0", First line: 0.5", Numbered + Level: 1 + Numbering Style: 1, 2, 3, ... + Start at: 1 + Alignment: Left + Aligned at: 2.31" + Indent at: 2.56"

**Formatted:** Left, Widow/Orphan control, Adjust space between Latin and Asian text, Adjust space between Asian text and numbers

**Formatted:** Widow/Orphan control

**Formatted:** Indent: Left: 0", Widow/Orphan control

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

San Francisco, CA 94108  
Tel: (415) 981-4800  
Fax: (415) 981-4846  
[dsharp@girardsharp.com](mailto:dsharp@girardsharp.com)  
[jelias@girardsharp.com](mailto:jelias@girardsharp.com)  
[apolk@girardsharp.com](mailto:apolk@girardsharp.com)  
[scottg@girardsharp.com](mailto:scottg@girardsharp.com)

Tina Wolfson (State Bar No. 174806)  
Theodore W. Maya (State Bar No. 223242)  
Rachel Johnson (State Bar No. 331351)  
**AHDOOT & WOLFSON, PC**  
2600 West Olive Avenue, Suite 500  
Burbank, CA 91505  
Tel: (310) 474-9111  
Fax: (310) 474-8585  
[twolfson@ahdootwolfson.com](mailto:twolfson@ahdootwolfson.com)  
[tmaya@ahdootwolfson.com](mailto:tmaya@ahdootwolfson.com)  
[rjohnson@ahdootwolfson.com](mailto:rjohnson@ahdootwolfson.com)

Scott L. Silver (*pro hac vice* forthcoming)  
**SILVER LAW GROUP**  
11780 W. Sample Road  
Coral Springs, FL 33065  
Tel: (954) 755-4799  
[ssilver@silverlaw.com](mailto:ssilver@silverlaw.com)

*Attorneys for Plaintiffs*

/s/ Dena C. Sharp  
Dena C. Sharp (*pro hac vice*)  
Jordan Elias (*pro hac vice*)  
Scott M. Grzenczyk (*pro hac vice*)  
**GIRARD SHARP LLP**  
601 California Street, Suite 1400  
San Francisco, CA 94108  
Tel: (415) 981-4800  
Fax: (415) 981-4846  
[dsharp@girardsharp.com](mailto:dsharp@girardsharp.com)  
[jelias@girardsharp.com](mailto:jelias@girardsharp.com)  
[scottg@girardsharp.com](mailto:scottg@girardsharp.com)

Tina Wolfson (TW-1016)  
Theodore W. Maya (*pro hac vice*)  
Bradley K. King (BK-1971)

158

FIRST AMENDED CONSOLIDATED CLASS ACTION COMPLAINT  
CASE NO. 5:20-cv-03556-BLF

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

**AHDOOT & WOLFSON, PC**  
2600 West Olive Ave., Suite 500  
Burbank, California 91505  
Tel.: (310) 474-9111  
Fax: (310) 474-8585  
[twolfson@ahdootwolfson.com](mailto:twolfson@ahdootwolfson.com)  
[tmaya@ahdootwolfson.com](mailto:tmaya@ahdootwolfson.com)  
[bking@ahdootwolfson.com](mailto:bking@ahdootwolfson.com)

*Interim Co-Lead Counsel for Advertiser  
Plaintiffs and the Proposed Advertiser Class*

Jonathan L. Rubin (*pro hac vice*)  
**MOGINRUBIN LLP**  
1615 M Street, NW, Third Floor Washington,  
D.C. 20036  
(202) 630-0616  
[jrubin@moginrubin.com](mailto:jrubin@moginrubin.com)

Daniel J. Mogin (*pro hac vice*)  
Jennifer M. Oliver (*pro hac vice*)  
Timothy Z. LaComb (*pro hac vice*)  
**MOGINRUBIN LLP**  
600 West Broadway, Suite 3300  
San Diego, CA 92101  
(619) 687-6611  
[dmogin@moginrubin.com](mailto:dmogin@moginrubin.com)  
[joliver@moginrubin.com](mailto:joliver@moginrubin.com)  
[tlacomb@moginrubin.com](mailto:tlacomb@moginrubin.com)

*Counsel for Plaintiffs Cliffv Care, Kinin,  
Rodrock, and Raintree*

Archana Tamoshunas (AT-3935)  
**TAUS, CEBULASH & LANDAU, LLP**  
123 William Street, Suite 1900A  
New York, NY 10038  
Tel.: (212) 931-0704  
Fax: (212) 931-0703  
[atamoshunas@tellaw.com](mailto:atamoshunas@tellaw.com)

April D. Lambert (*pro hac vice*)  
John D. Radice (JR 9033)  
**RADICE LAW FIRM, PC**  
475 Wall Street

Formatted: Border: Bottom: (No border)

Formatted: Left, Tab stops: Not at 1" + 6.58"

Princeton, NJ 08540  
Tel: (646) 245-8502  
Fax: (609) 385-0745  
alambert@radicelawfirm.com  
jradice@radicelawfirm.com

*Counsel for Plaintiff Hanson Law Office, as*  
*successor in-interest to Hanson Law Firm, PC*

Richard F. Lombardo (*pro hac vice*)  
Peter F. Rottgers (*pro hac vice*)  
**SHAFFER LOMBARDO SHURIN**  
2001 Wyandotte Street  
Kansas City, MO 64108  
(816) 931-0500  
rlombardo@sls-law.com  
prottggers@sls-law.com

*Counsel for Plaintiffs Cliffy Care, Rodrock,*  
*and Raintree*

Jason S. Hartley (*pro hac vice* forthcoming)  
Jason M. Lindner (*pro hac vice* forthcoming)  
**HARTLEY LLP**  
101 W. Broadway, Ste 820  
San Diego, CA 92101  
(619) 400-5822  
hartley@hartleyllp.com  
lindner@hartleyllp.com

*Counsel for Plaintiff Kinin*

**Formatted:** Font: Not Italic

**Formatted:** Indent: Left: 0", First line: 0",  
Widow/Orphan control

**Formatted:** Border: Bottom: (No border)

**Formatted:** Left, Tab stops: Not at 1" + 6.58"

**Page 1: [1] Style Definition** Author 10/5/2022 12:12:00 PM

Paragraph

**Page 1: [2] Style Definition** Author 10/5/2022 12:12:00 PM

Style1: Indent: Hanging: 0.25"

**Page 1: [3] Style Definition** Author 10/5/2022 12:12:00 PM

Complaint Relief

**Page 1: [4] Style Definition** Author 10/5/2022 12:12:00 PM

Complaint Sub-Paragraph

**Page 1: [5] Style Definition** Author 10/5/2022 12:12:00 PM

Complaint Paragraph

**Page 1: [6] Style Definition** Author 10/5/2022 12:12:00 PM

copyblack

**Page 1: [7] Style Definition** Author 10/5/2022 12:12:00 PM

p1

**Page 1: [8] Style Definition** Author 10/5/2022 12:12:00 PM

Medium Grid 21

**Page 1: [9] Style Definition** Author 10/5/2022 12:12:00 PM

List Level 6

**Page 1: [10] Style Definition** Author 10/5/2022 12:12:00 PM

List Level 5

**Page 1: [11] Style Definition** Author 10/5/2022 12:12:00 PM

List Level 4

**Page 1: [12] Style Definition** Author 10/5/2022 12:12:00 PM

List Level 3



**Page 1: [13] Style Definition** Author 10/5/2022 12:12:00 PM

List Level 2

**Page 1: [14] Style Definition** Author 10/5/2022 12:12:00 PM

List Level 1

**Page 1: [15] Style Definition** Author 10/5/2022 12:12:00 PM

Heading

**Page 1: [16] Style Definition** Author 10/5/2022 12:12:00 PM

GE Numbered Body: Indent: Hanging: 0.25"

**Page 1: [17] Style Definition** Author 10/5/2022 12:12:00 PM

List Bullet 2: Indent: Left: 0", Hanging: 0.5", Tab stops: Not at 0.63"

**Page 1: [18] Style Definition** Author 10/5/2022 12:12:00 PM

Normal (Web)

**Page 1: [19] Style Definition** Author 10/5/2022 12:12:00 PM

Default

**Page 1: [20] Style Definition** Author 10/5/2022 12:12:00 PM

Quote

**Page 1: [21] Style Definition** Author 10/5/2022 12:12:00 PM

List

**Page 1: [22] Style Definition** Author 10/5/2022 12:12:00 PM

No Spacing

**Page 1: [23] Style Definition** Author 10/5/2022 12:12:00 PM

LCPlNum\_L9: Indent: Left: 4.38", Hanging: 0.13", Tab stops: Not at 3"

**Page 1: [24] Style Definition** Author 10/5/2022 12:12:00 PM

LCPlNum\_L8: Indent: Left: 3.75", Hanging: 0.25", Tab stops: Not at 2"